## Smart Luck

# ADVANTAGE GOLD USER MANUAL \& TUTORIAL 

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## FORWARD

Whether it's big jackpots you're after, or winning smaller prizes consistently, you need to play intelligently to increase your chances of winning a game. Lottery drawings are random, but Lotto does not have to be a pure chance play. You can apply skill to the Lotto game because you can choose the numbers you play. As in card games that combine chance and skill, the skillful player has the advantage over the unskilled player-and wins more often.

There are two kinds of luck when it comes to winning lottery prizes: dumb luck and smart luck. Dumb luck occurs by coincidence. Winning by dumb luck is the easy way, but you can't count on fate to point a finger at you. Smart Luck increases your win probability through the use of strategy.

Gail Howard was America's original lottery expert-the pioneer of scientific lottery strategy. She created the most famous lottery systems used in the world today - Smart Luck lottery systems!

Smart Luck systems and strategies have become textbook classic in the lottery world. They are often imitated but never duplicated. When you have Smart Luck lottery books and computer software, you have the authentic, original Gail Howard product that has been made even better with the latest strategies to beat the lotteries.

Smart Luck has turned thousands of lottery losers into winners. We are constantly improving and fine tuning our incredibly successful methods and working on new and better systems to beat the lottery. In the process, we discover new techniques that help win lottery prizes more often. You benefit by these innovations in the form of many free program updates and low-priced upgrades.

## INTRODUCTION

## Three Methods to Beat the Odds in Lotto

The object of using these scientific systems is to get the odds more in your favor, and to play the probability of what is most likely to happen. Number selection is just one of three methods you can use to reduce the odds. Game selection is important, too. You can immediately reduce the odds by millions by playing a Lotto game with a smaller number field.

And last, but equally important, is the use of Balanced Wheeling Systems-a method of playing with large groups of Lotto numbers, scientifically placed on your bet slips in a special order, that assures a specific win guarantee if some or all of the winners are in the chosen group.

Lottery numbers are randomly drawn. But randomly drawn numbers form patterns that are to a certain extent predictable. Having carefully analyzed hundreds of thousands of lottery drawings over dozens of years, we have verified the following incredibly simple rule.

## "That which is MOST POSSIBLE happens MOST OFTEN and that which is LEAST POSSIBLE happens LEAST OFTEN."

This is supported by the mathematical fact that the odds of any particular pattern occurring are: the number of ways the pattern can occur divided by the total possible combinations. For example, if you play a combination that forms a pattern matching only $5 \%$ of the possible combinations, you can expect that $95 \%$ of the time the pattern you selected will fail to show up, thereby giving you no chance to win $95 \%$ of the time. Playing combinations that don't match the $5 \%$ pattern will not guarantee that you'll win, but it will guarantee that your combination will have at least a chance to win $95 \%$ of the time.

We can chart the movement of Lotto numbers-just as Wall Street analysts chart past price action to determine future price trends to reduce the odds against the investor.

## Methods Based on Mathematical Probability

Our number selection methods are based on mathematical probability, but no knowledge of math is required to use them. By analyzing the past action of lottery numbers, we get a perspective of what is probable (likely to happen) and what is not probable (unlikely to happen).

Certain numbers or number combinations can be eliminated from your field of play because, according to mathematical probability, their chance of being drawn is nil. One such example is the set of six consecutive numbers, 1-2-3-4-5-6, which has never occurred. Even six numbers within the same ten-number group have never been drawn, much less six numbers from the single digit group or the highest six numbers in the game.

Some people have the mistaken notion that in Lotto, everything has to even out. That simply is not true. In a weekly $6 / 49$ Lotto game, for example, each six-number combination has a chance of hitting once every 268,920 years!! So, it would be pointless to play the same six numbers week after week, year after year, because you think they are "due" to hit.

## The Trend Is Your Friend

Lotto numbers move in trends. A Lotto number that is in an uptrend is winning frequently. A Lotto number that is in a downtrend seldom wins. It is much easier to spot a hot number than to guess when a long shot number will finally come in. And you don't get any more credit for picking a winning long shot Lotto number than you do for picking winning hot numbers. So, using the contrarian approach in Lotto (that is, betting against the trend) is not recommended.

Of course, long shot numbers do come in. For every four or five winning hot numbers, one or two numbers will come in that have been out for more than ten drawings. Select your long shot numbers very carefully and have a good reason for choosing them. The number out the longest is NOT necessarily the number due to hit.

ADVANTAGE GOLD charts focus on three time periods:

1. Short Term Trend charts: examine only the last five to 10 drawings, such as the Bias Tracking charts
2. Medium Term Trend charts: examine only the last 50 or 60 drawings, such as the Drawings Since Hit Chart.
3. Long Term Trend charts: are those most valuable when based on maximum historical data. This means hundreds or even thousands of drawings. Examples are the Skip and Hit Chart and Companion Number Charts.

Although the program allows you to change the game range for any chart, you will get the best results if you use the amount of data the chart was designed for.

## ADVANTAGE GOLD OVERVIEW

ADVANTAGE GOLD has great flexibility and a rich assortment of useful features that just doesn't exist in any other lottery software. The sheer quantity of powerful charts and reports may seem overwhelming at first glance, but as you become familiar with each one, you will appreciate its purpose for being included in this program. Certain charts in ADVANTAGE GOLD select specific numbers for the next drawing. Others zero in on winning numbers by tracking biases or most probable groups. Yet others produce projections or give reports with valuable information.

The Smart Picks feature automatically selects best numbers scientifically from specific patterns in each of seven charts (Smart Picks are starred with an asterisk "*"). But ADVANTAGE GOLD is much more than a scientific number generator. Use it to its fullest power by studying the Lotto numbers from every possible angle.

If you read the manual carefully, you'll learn how to identify the winning patterns that produce winning numbers. Human judgement, both logical and intuitive, can refine your number picks once you learn how to read the charts. To get the most out of this program, familiarize yourself with ALL the many features that will allow you to use these charts more efficiently and effectively.

You don't have to use every chart in ADVANTAGE GOLD each time you select your numbers. But, you should study, at least once, all the charts for your own Lotto game so that you'll know the parameters of what is probable and what is not probable, based on historical, mathematical fact.

New Lotto games will not produce the same results as older Lotto games that have welldefined patterns. Certain charts become more reliable after several hundred drawings. Until your game accumulates sufficient history, emphasis should be placed on charts that don't require a
great deal of historical data, which we will point out as we go along.
Throughout this manual, the dead Pennsylvania (PA0640) Lotto game is used when examples are needed for demonstration purposes. (Dead games don't change).

The next few pages have installation and operating instructions as well as important functions to be aware of with using the program. Then we explain how to activate the Smart Picks and how to turn the Powerball or Bonus Number on or off.

After that, we will describe each of the charts (each Menu Option) in detail. First you will learn the purpose of the chart, then how to use it, followed by an example of its use.

In the section, "Smart Luck Secrets of Winning", towards the end of the manual, we will pull everything together and tell you which are the most important charts to use when and in what order. We'll also reveal the short cut way we pick our numbers in ten minutes or less. Don't miss this section!

## GETTING STARTED

## Installation

Here is a direct link to the ADVANTAGE GOLD install file on our web site. By default, it should install to "C:\Program Files $\backslash$ SmartLuck $\backslash$ agold" folder. We don't recommend changing the folder unless you have a reason and are knowledgeable enough to deal with the changed folder. You can install the program in Demo Mode to use a limited version for free. To access the full version, you will need the registered name, serial number, and installation key. If you received these by download purchase, please follow the installation instructions in the email.

Make sure you install the correct program - the older ADVANTAGE PLUS (A+) software will not install with ADVANTAGE GOLD (A*) serial number and key. If you get a warning about your serial number starting with the wrong number, you probably are trying to install a different program than your codes were created for.

## Open ADVANTAGE GOLD

A shortcut icon, (a yellow $\boldsymbol{A} *$ symbol) created by the install program should now be on your desktop. Click the icon to open ADVANTAGE GOLD. The program will
open to the main history view screen.

## Downloading History Files

|  | Menu | Icon |
| :--- | :--- | :--- |
| Access Lottery <br> Updater: | Help $\rightarrow$ Run Lottery Updater | Click this globe/phone icon on <br> the main icon menu bar on the <br> Modify History screen or <br> at the bottom of the Select <br> History File screen |

The first step is to download history files before you start using ADVANTAGE GOLD. Use the built-in Lottery Updater program to get your drawing updates. You can run this program any time, but our updates are usually done Monday-Friday around noon. Close Lottery Updater when done.

## Important Program Functions

## Tooltip Hints

|  | Menu / Mouse | Right-click Menu |
| :--- | :--- | :--- |
| Turning on/off <br> hints | (i) Hints are turned on when this icon <br> shows in the top icon menu of the <br> Modify History screen. Click to <br> turn hints off. | The right-click menu will show more <br> options for displaying hints like a time <br> delay or shorter/longer display time |
|  | Hints are turned off when this icon <br> replaces the one above. Click to <br> turn hints back on. |  |

ADVANTAGE GOLD offers many tooltip hints which are blue pop up boxes that explain more about what you are viewing when you hover the mouse over a cell, button, or other feature on a chart. You can turn these hints on and off or change how long or when they display using the commands/icons listed above. We recommend leaving the hints on until you are familiar with all of the features of the program. They often give additional information about using a chart that you would not otherwise be aware of.

## Fl Instant On-Screen HELP

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Access Help: | Help $\rightarrow$ Help Contents | F1 |

Instant on-screen help is available throughout the program to give you more instructions for using the software. A window with the built-in help file will appear with the appropriate page selected. You can navigate or search through the other pages of the help file with the links on the left menu.

## F2 Standard PRINT Key

|  | Menu / Mouse | Keyboard Shortcut |
| :---: | :---: | :---: |
| How to print: | File $\rightarrow$ Print right-click $\rightarrow$ Print | F2 or CtrI+P |

You can print any chart from the program. When you access the Print screen, you can select a printer, specify margins, color, and how many pages to print under the General tab. Click Advanced for more settings including font colors and sizes and options to turn on or off the grid lines of a chart for the printout.

## F3 Standard CHANGE RANGE Key

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Change <br> Range | $\boldsymbol{R}$ | F3 or CtrI+R |
|  | Edit $\rightarrow$ Change Active Range <br> right-click $\rightarrow$ Change Active Range | - or + |
| Shift or <br> reset range | $13 \boldsymbol{\sim}$ ค |  |

About Range: Range specifies which drawings in the history of that game that you want to use to create the statistics for the charts. The program default is to use the entire game file, or if a game has changed format, we may use a pre-locked range which starts at the first drawing of the most recent number field of the game. The Range button is used throughout most of the program to allow you to specify starting and ending game numbers or drawing dates. This limits all charts to the specified range which will then be shown on the bottom line of the chart
window. Whichever range you select will remain in effect until you change it, leave the program or switch to a different history.

Change Range: Use the Range button or the F3 key, or click on the Range text at the bottom of a chart.

You can also use the small left and right arrow buttons at the bottom right of some chart windows (or the + and - key) to quickly add or remove a drawing from the range. The $>\|$ button will reset the range to end at the most recent drawing. If there is a number to the left of the arrows like in the example in the chart above, that number is how many Smart Picks the chart selected.

TIP: You can step back through the Range by removing one drawing at a time to see previous Smart Picks (denoted by a * next to the number) and compare them to the winning numbers that hit (denoted by a + next to the number) for the last draw in the selected Range.

Structure Changes: The chart at the top of the Set Range window shows the drawing range, date range, and numbers used in the different number fields that the game had in the file. You can click on a range to automatically set this group of drawings as the current range and then click the $O K$ button.

Set a custom Range: Change the Starting Draw and Ending Draw (with corresponding dates) to any value you want by using the date drop down to select from the calendar, highlighting over the existing draw \# and typing a new draw, or clicking on the month/day/year and typing a new value. Then click the $O K$ button.

Lock in the Range: After you have specified your range, you can click the check box next to Save Starting Draw in File to save the selected range in the current history file as a permanent default setting. This allows you to keep the history of old games in the same history file, but ignore the old drawings except when you specifically extend the range to include them. This is what we do for games that change format, once there have been enough drawings in the new format to be useful. You can change the range again at any time and save new settings.

Use Fixed Range: Click the check box next to "Use FIXED range of" to engage the Fixed Range setting, and then use the arrow buttons or highlight the number in the text box and type over it to specify how many drawings you want to show. This way you can view just the past 50 drawings, for example. This feature automatically disengages when you change histories or leave the program.

## More about Range: See our blog post about using the Range feature.

## Opening a chart

|  | Menus / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Select Chart: | 돜 Charts link on the main top menu |  |
| PICK CHART drop down menu |  |  |$\quad$| The letter or number of the |
| :--- |
| chart (same as A+) |

Select or change charts: Open a chart using the menu, drop down selector, or keyboard shortcut. From inside any chart, you can use the chart selector button to close the chart and go back to the main screen with the chart menu open so you can choose a new chart.

## Exiting the Program, a Chart, or a Window

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Close a window: | Click the $X$ in the upper right <br> Some windows may have a Close, <br> Cancel, or Save button at the bottom <br> that will also close the window | ESC closes Advantage Gold, <br> all charts, and many pop up <br> windows |

Closing a chart will return you to the default 2. Modify History main screen.

## Instant Column Sorting

|  | Menus / Mouse |
| :--- | :--- |
| Column sorts | Click a column heading to sort by that data. Click again to reverse direction. |

Many charts will sort the columns shown by highlighting the column header (not all columns can be sorted). For most charts, the column that is currently being sorted is highlighted in yellow. Some charts have an arrow indicating the ascending or descending order of sorting.

## Using Bonus and Powerball number games

|  | Menu / Mouse |
| :---: | :---: |
| Selecting to include or exclude a bonus number: | Games with a bonus number will have these icons at the top of a chart. Games with a powerball number will have similar icons using a $P$ instead of a $B$. <br> $\boldsymbol{B}$ - or $\boldsymbol{P}$ - excludes bonus <br> $\boldsymbol{B}+$ or $\boldsymbol{P}+$ includes bonus <br> $\boldsymbol{B}^{*}$ or $\boldsymbol{P}^{*}$ selects only the bonus |

The top right of the chart window will show which bonus option has been selected (for example: Powerball OFF or Bonus Only) as well as the corresponding icon will be highlighted.

## Graph Display Options

|  | Menus / Mouse |
| :---: | :---: |
| Choosing a graph style: | M ulll $x$ ar |

Graph display options: For some charts with graphs, like 7c. Hit Charts Graph you can click the different graph icons at the top of the chart to display the chart in a different way: line chart, bar chart, area chart, points with best fit line, or points with best fit curve.

## Resizing a Chart Window

To change the size of the program window, you have the following options:

- Maximize the Window: Click the square in the top right corner to maximize the program to full screen.
- Minimize the Window: To go back to a smaller size window, click the double square icon in the top right that replaces the single square in maximized mode.
- Full Height Window: Right click on the hot zone in the toolbar at the bottom of a chart (any of the red bottom line that doesn't have text on it) to make this chart stretch to the full height of your screen, showing you the most drawings and statistics you can see at once. Right click again to get it back to what it was.


## Screen Display Options

The right-click menu that appears when you hover over a chart and click the right mouse button has options for changing the font and other display options:

- Increase Font Size, Decrease Font Size, Change Font: Change the font size of the chart larger or smaller or pick a different font family, color, and style. If you rightclick on a column heading before selecting Font, you can change just the Heading font or font-size. This setting is saved per chart. You can quickly change size by typing CTRL+ or CTRL- (the same behavior as many Internet browsers use). Note: If you size the main form to a font and size that's comfortable, the other charts will open at that same size.
- Tooltip Hints or Show Grid Hints: This option allows you to select whether you want Tooltip Hints to show up. From the main screen, Modify History, there are more right-click options that allow you to choose to show the hints for a shorter or longer length of time, or set a shorter or longer delay before the hints will pop up.
- Show Horizontal Lines: Turn this option off if you don't want to see the divider lines that appear between rows.
- Show Vertical Lines: Turn this option off if you don't want to see the divider lines that appear between columns.
- Show Grid Bands: Turn this option off if you don't want to see the alternating row background colors (white and grey are default). Don't forget you can change the grid colors under the Font menu.
- Set as default Chart size: This setting, when checked, makes the size of the chart the default size for all charts - which means each new chart that opens will open at this same size.
- Print: This is another way to access the print function, also available with the printer icon, CTRL + P, or under the File menu.
- Export Grid to Text: This will open the chart Export window which you can set which rows and columns to include, how to separate the numbers, and export to a text file. This feature is used to create a text file which can then be "imported" into excel, or other programs. This option is only available on charts that are internally based on the grid. Charts 4 a and 4 b are actually not based on a grid and so this doesn't work on those charts (Most likely we will make a custom export for these two charts at some point).


## Preferences

|  | Menu / Mouse |
| :--- | :--- |
| Accessing Preferences: | File $\rightarrow$ Preferences |

Click the tabs at the top of the Preferences screen to access Startup, Main Form, Other, and Advanced Options. Click the check box until it shows a check mark to turn on a setting. Click again until it shows a blank box to turn off a setting.

## Startup Settings:

- Show Splash Screen - turns on or off the about screen that appears for a few moments when you initially open the program.
- Check for Upgrades - will connect to our website to see if there are free updates available for the program. We recommend keeping this checked so you can get the newest features and bug fixes right away.
- Check for Message from Smart Luck - will connect to our website to see if we have any notices about new programs or other news to share with you. We only release a new message if we feel it is important.
- Check for History Updates - will connect to our website to check for updates to lotto history files.


## Mainform Settings:

- Show Day of the week - will include a column on Chart 2 to show the Day of a drawing.
- Show Sums - will include a column on Chart 2 to show the sum of the winning numbers.
- Show Odd/Even - will include a column on Chart 2 to show the ratio of odd to even winning numbers in the drawing.
- Show Low/High - will include a column on Chart 2 to show the ratio of odd to even winning numbers in the drawing.
- Show in Last 5 (In L5) - will include a column on Chart 2 to show how many winning numbers in the drawing also hit in the past 5 drawings.
- Show in Last 10 (In L10) - will include a column on Chart 2 to show how many winning numbers in the drawing also hit in the past 10 drawings.
- Show Standard Deviation (SD) - will include a column on Chart 2 to show the standard deviation of the winning numbers.
- Show Unique Gap Score (U/G) - will include a column on Chart 2 to show the total of of unique gaps in the drawing.


## Other Settings:

- Include Bonus Numbers by default - will set the default to include bonus numbers in games that use them.
- Hide Smartpicks - will remove the $*$ asterisks that denote Smart Picks on the 7 Smart Picks charts.
- Expand form to fit grid width - will automatically stretch a window to fit all of the columns on the screen without scrolling.
- Do Not show grid bands - will turn off the alternating colors of the rows on a chart.
- Enable One-Number lotto files - allows you to select Powerball only files for use like the old ADVANTAGE PLUS program. This option is usually not needed, but there are a few history files that do not include the Powerball number in the main file, so this setting allows you to view those files.


## Advanced Settings:

- Wheel Gold Location - allows you to check or change the location of any Wheel Gold programs you have installed to make sure that ADVANTAGE GOLD can connect to them.
- Filtering Generator Location - allows you to check or change the location of FFWG if you have installed it to make sure that ADVANTAGE GOLD can connect to the program.


## Accessing Purchased Wheel Programs

If you purchased WHEEL SIX GOLD, WHEEL FIVE GOLD, WHEEL FOUR GOLD, WHEEL TEN KENO GOLD, or FILTERING FULL WHEEL GENERATOR and installed them in the same directory with the ADVANTAGE GOLD program, they will appear under the WHEELS menu. The same function keys that accessed these wheel programs in Advantage Plus will work with ADVANTAGE GOLD as well, so you can instantly run them without leaving ADVANTAGE GOLD.

Note: ADVANTAGE GOLD cannot access older WHEEL PLUS programs. For best results, purchase a discounted upgrade to the Windows version of the older DOS wheel programs you own.

## Keyboard Shortcut Keys

The older DOS programs like ADVANTAGE PLUS could only use the keyboard. Because many of our customers are used to accessing options with the keyboards, we have tried to keep the same keyboard shortcuts when possible, although you can now use the mouse to access these options as well.

If you are unfamiliar with your keyboard: On the right side, you see keys labeled with a + (plus) and - (minus), PAGEUP, PAGEDOWN, HOME, END, and arrow keys pointing UP, DOWN, RIGHT, and LEFT. You can use these keys to move across data on the screen instead of the mouse buttons and scroll wheel.

Now locate the Function Keys on your keyboard, usually at the top. Function keys are marked F1, F2, F3, F4, so on. These keys can access Help, Printing, Wheeling programs, and other options that were also used in ADVANTAGE PLUS.

The + (plus) and - (minus) keys take you back and forward in game history Range, allowing you to check the validity of the automatic Smart Picks, among other things.

NOTE: if your keyboard does not have a separate Plus key on the keypad, you may use the * key on the keypad as an alternate.

The arrow keys, pointing UP and DOWN are used to select features, or to move around in
the charts. The PAGEUP, PAGEDOWN keys help you move though a chart fast. The HOME and END keys help you get to the top or bottom of a page or chart instantly. Use the UP/DOWN arrow keys to position the light bar on any line to highlight it instead of clicking on it with the mouse. Any time you want to exit the chart on your screen, press the ESC key to get to the Main Menu.

NUM LOCK is important. When it is on the keypad produces numbers, NOT cursor control keys. When it is OFF, the cursor control functions are activated.

## Smart Picks and the Lottery Advantage Scoreboard

Seven of the Charts in ADVANTAGE GOLD, Charts 3, 4, 5, 6, 7, $C$ and $D_{\text {, have Smart }}$ Luck rules for picking numbers built into the chart. The selected numbers, the Smart Picks, are marked with '*' (asterisk) next to the lotto number.

We DON'T recommend the Smart Picks, unless you just don't have the time to study the charts. Analyzing the charts yourself can normally do better.

ADVANTAGE GOLD contains a Scoreboard (Chart V) where each chart's Smart Picks are recorded, which will tell you the numbers that were picked by the most charts that you ran. After each new drawing is entered in a given history, the Lottery Advantage Scoreboard is cleared and no numbers are selected for any of the charts. To get the Smart Pick numbers into the Scoreboard, the charts that contribute to the Scoreboard must be first viewed on the screen.

As long as you have run at least one applicable chart, you can view the Scoreboard or go to the Smart Picks screen, Chart W, and tell it how many numbers you want. The Number Group Test table on the right side of Chart W will show you how the selected set of Smart Pick numbers would have performed in past drawings for your game. You can see the number of drawings and percentage of drawings that the group of Smart Picks would have matched as a set of winning numbers in the past.

## IMPORTANT: ONLY THE CHARTS THAT YOU RUN WILL CONTRIBUTE TO THE SCOREBOARD AND WILL BE AVAILABLE FOR THE AUTOMATIC Smart Picks OPTION. <br> If you update a lotto history file, you will need to run the charts again

## to get new Smart Picks.

First make sure that the RANGE at the bottom of the screen ends at the most recent drawing. If you want to run all of the Smart Pick charts quickly and then get the best numbers based on that, from the ADVANTAGE GOLD Main Menu, type 3, ESC, 4, ESC, 5, ESC, 6, ESC, 7, ESC, C, ESC, D, ESC. At this point all charts that can contribute to the scoreboard will have done so. Then press $W$ and specify the Selection Method you want and the Number of Smart Picks in the selector box, ex. 18. The top 18 numbers would show on the screen immediately, as well as a Number Group Test on the side.

You can click the Wheel Button or press F7 (same as in Advantage Plus) to open your Wheeling program to wheel the Smart Picks group you were given. Note: This is only available if you have purchased WHEEL GOLD or FFWG wheels that are the same pick-size as the game you chose Smart Picks for.

## MENU OPTION 1: SELECT HISTORY

## Purpose and Overview

The purpose of the Select History screen is to allow you to choose the lotto game that you want to study.

ADVANTAGE GOLD will display any lottery files that you have first downloaded with LOTTERY UPDATER, as well as a demo file called Pennsylvania Dead Lotto. See the "Important Program Functions" section of this manual for instructions in getting history files with LOTTERY UPDATER.

## Selecting a Lotto History File

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Access the Select <br> History File <br> screen: | Click to Pick History File <br> Click to Pick History File drop down, folder <br> icon, or: <br> Pick Chart (drop down) <br> 1. Select History | $\mathbf{1}$ |
| Choose a file: | Move the light bar to your file by scrolling | Move the light bar to your |


| to it with the mouse or scroll bar To open |  |
| :--- | :--- | :--- |
| the file, do one of the following: |  |
| $-\quad$ Double-click a game |  |
| -Click the file and choose the <br> Select button <br> - Right-click a file and choose <br> Open. | file by tying the letters of <br> the state or country <br> abbreviation or use the <br> arrow keys to navigate <br> through the file list. |

From the Select History File screen, you will see a list of all the files you downloaded with LOTTERY UPDATER. The files are listed by USA state or International Country. You can see the game name, the file name, how many drawings the file includes, and the last draw of the file.

Quickly find the lottery you want by typing the state letters of that lottery. For example, type f15 to get the Florida pick-5 lottery or nyk to get New York Keno game. Each letter you type will move the light bar closer to what you're looking for.

If the list shows only Pennsylvania dead lotto, then you either did not download files or ADVANTAGE GOLD is not looking in the same folder that LOTTERY UPDATER used to save files. Click the globe icon to check the folder used by LOTTERY UPDATER - it displays the folder it is using in the bottom left of the screen. Close LOTTERY UPDATER and click the Change Folder or folder icon at the bottom right of the Select History File screen to tell ADVANTAGE GOLD to use the same folder as LOTTERY UPDATER.

## Favorites

You can save a file as a favorite so that you can access it even faster in the future. Highlight a file and click the Add to Favorites button. Once you have favorites added, they will be listed as small buttons at the top of this screen. Click the favorite button to select that history file to use. Right-click a favorite button to remove it or rename the button.

## Right Click Options

Right-click on a file in the Select History File screen to access the following right-click menu options:

- Open: Selects the highlighted history file and opens it in the main screen.
- Add to Favorites: Adds a shortcut button to the favorites menu bar at the top of the

Select History File screen so you can quickly change files between your favorites. You can also right-click on a favorite button to remove it as a favorite, or to change the name of the button.

- Refresh: This will reload the list of history files so you can be sure you are viewing the most recent data available.
- Delete File: Deletes the highlighted history file from the selected history file folder. You will no longer be able to access this file unless you download the same file again with LOTTERY UPDATER in the future.
- Change Folder: This will allow you to browse your computer for a new directory to save your history files. It is not recommended to change this folder often, as other programs may be using the currently selected folder. You can also click the Change Folder link or small folder icon at the bottom right of the screen to access this option.
- Exit: Exits the Select History File screen and returns to the main screen of the program.


# MENU OPTION 2: MODIFY HISTORY (main screen) 

## Purpose and Overview

When you open ADVANTAGE GOLD, you will see the default 2. Modify History screen. Option 2 is used primarily to enter new drawings in your Lotto game histories or view the drawings with a quick overview of statistics. This chart shows the following information (fields cannot be edited unless specified below):

- Draw \#: The drawing or game number. This field is a record number based on how many drawings are in the file.
- Date: The date of the drawing. Double-click a date to change it. While the date is editable, you can use the arrow keys or +, - keys or type the new date. You can also click the down arrow next to it to view a calendar and use the mouse to select a new date. Dates for future drawings will be projected so you don't have to type them if adding a new drawing that matches the current drawing day pattern. If a drawing is missed, this prediction schedule may be off until a new pattern is established.
- Day: This displays the day of the week which is set automatically based on the date field.
- Numbers: the winning number combination (main set of numbers) drawn on that date. Double-click to open the edit field and clear or delete and type over the numbers. You can also click the down arrow to view a number pad to select numbers with the mouse.
- ++: Bonus Number(s), if there are any. (Bonus numbers are also known as alternate, supplementary, Keyball and Powerball numbers.) Double-click to edit the numbers. The rest of the statistics on this screen always exclude the bonus number.
- B/S: The ball set or rotation field is optional and will not be shown for most games. This is most often used to display a number or letter to differentiate between multiple drawings on the same date.
- Sum: The sum if you add up the total value of the winning numbers in the drawing.
- O/E: The ratio of odd to even numbers in the drawing.
- $L / H$ : The ratio of low to high numbers in the drawing.
- In L5: How many winning numbers were repeated from numbers drawn in the past 5 drawings.
- In L10: How many winning numbers were repeated from numbers drawn in the past 10 drawings.
- S.D.: Standard Deviation of the winning numbers in the drawing.
- $\boldsymbol{U} / \boldsymbol{G}$ : How many unique gaps occur between the winning numbers in the drawing.

Here is an example of how to understand the information you are seeing, using the demo file, Pennsylvania Dead Lotto. We read the last row (most recent drawing) of the chart this way: PA0640 had 621 Lotto drawings (Draw \# is 621) as of Monday (Day), February 15, 1988 (Date). The six winning numbers were 4-6-19-21-34-35 (Numbers) and 2 was the Bonus Number (++). No Ball Sets are tracked, so the $\boldsymbol{B} / \boldsymbol{S}$ column is not displayed in this game. If you add the winning numbers: $4+6+19+21+34+35$, you get the Sum of 119 . Three odd numbers and three even numbers were drawn, so the $O / E$ ratio is $3 / 3$. Three low numbers and three odd numbers were drawn so the $L / H$ ratio is $3 / 3.4$ numbers were drawn that were winners in the last 5 drawings ( $\boldsymbol{I n}$ L5), and 4 numbers were drawn that were winners in the last 10 drawings ( $\boldsymbol{I n} \mathbf{L 1 0}$ ). The standard deviation (S.D.) of the numbers in the drawing is 13 and 6 unique gaps $(\boldsymbol{U} / \boldsymbol{G})$ occurred. Remember: bonus numbers are not included in the statistics for the Sum through $\boldsymbol{U} / \boldsymbol{G}$ columns.

You can scroll through the history with the mouse scroll wheel and/or clicking the scroll bar on the screen. Alternatively, you can press PAGEUP or PAGEDOWN to go backward or forward in history one page at a time. Press the Home key to get to game one instantly. To get to the most recent drawing, press the End key or, you can scroll slowly through the history by pressing the Up or Down arrow key. Click on a drawing or use the UP/DOWN Arrow keys to position the light bar on any line to highlight it for more easy viewing.

## Right Click Options

In addition to the right-click options that are common to most charts, the following options appear on the Modify History screen. Right-clicking on a cell in a drawing or anywhere inside the Modify History screen to access the following right-click menu options:

- Add New Drawing: Choose this to add a drawing at the end of the file. An edit box will pop up for you to enter drawing numbers.
- Edit: Right-click on a specific cell for a drawing to edit that field. You can edit the Date, Numbers, Bonus, or Ballset if applicable.
- Insert: Choose this option to insert an entire drawing, a new date (which will shift all drawings after this point by a day), or numbers only (which will shift all numbers after that point). In most cases, you would not want to insert a date or numbers, but should choose to insert an entire drawing.
- Delete: Choose this to delete an entire drawing, a date only, numbers only, or a range of drawings. Be careful with deleting a date or numbers since it affects other drawings.
- Goto Draw \#: To quickly jump to a specific draw \#, choose this option and enter the draw number you are searching for. Also access this option with CTRL+G.
- Goto Draw Date: To quickly jump to a specific date, choose this option and enter the date you are searching for or click the down arrow button to view the calendar to select a date. Also access this option with CTRL+ D.
- Find Lotto Numbers: This option brings up a number pad and text box where you can select or type a group of numbers to match 1 or more numbers in a drawing. Hit the Previous or Next buttons to jump to a drawing that matches your numbers, or hit the Hit With button to see a sub-chart with the list of matching drawings. The Hit With chart also has 2 graph options you can view.
- Change Active Range: This is another way to access the Range setting to adjust which drawings the program will use to create charts.
- File Properties: In most cases, you will not need to adjust the File Properties because downloading our files from Lottery Updater will reverse these changes, but if you keep track of your own lotto files, you can use this option to set the file name, Location, Lotto Name, Draw Size, Bet Size, Number field, Bonus numbers, and more.
- Save History: This is another way to Save the history file after you have made changes. You can also click the down arrow button at the top or use CTRL+S to save.
- Save History As: This will allow you to save a file under a new file name. This can be helpful if you want to keep a second copy of a file for your own updating purposes instead of downloading our updates.


## History Updates

LOTTERY UPDATER will usually get files current as of the last day if you update after about 12 pm Eastern, except weekends which are delayed until Monday. If you are using a lottery that draws more frequently, you may need to key in the weekend's winning numbers yourself to get the history current before using the charts. This was designed to be as easy as we could see how to make it.

Note: If you make changes to a game file and then download our file, it will replace yours.

## Modify Game History Information - File Properties

You can modify information about a lotto game by editing the file properties. Remember: Editing a history file's properties will be overwritten if you then download the same file from LOTTERY UPDATER. Use your own file names if you want to keep your own files separately from ours.

|  | Menu / Mouse |
| :--- | :--- |
| File Properties: | Edit $\rightarrow$ File Properties <br> right-click $\rightarrow$ File Properties |

- File Name: The file name starts with a two-letter state abbreviation (USA) or threeletter country abbreviation, followed by a 4 digit number format which includes the picksize and number field of the game. Ex. pa0640 (pa for Pennsylvania followed by 0640 for the $6 / 40$ game). The file will have a .slh file extension if you are viewing it outside of ADVANTAGE GOLD. Special cases are the keno games which are usually named with the location and keno instead of numbers.
- Location: The state or country the game is played. This will be automatically filled out based on the beginning of the file name. Ex. Pennsylvania.
- Lotto Name: The name of your game, including the location and number format. It can include $\mathrm{a}+\mathrm{b}$ for bonus number games, and a D for Dead if the game has ended. Ex. Pennsylvania Lotto $6 / 40+b(d)$. The lotto name needs to be fairly short or it will be cut off because the old Advantage Plus could not handle long file names and some customers still use the old program to view our SLH files.
- Notes: Notes about this game that may be important.
- Starting: This is the date of the first drawing in the file, or the first drawing in the currently selected Structure Change. Ex. 4/16/1982 is when pa0640 began.
- Draw Size: This is also known as the pick-size of the game, or how many numbers the game will draw. Ex. 6.
- Bet Size: This is how many numbers you pick on your ticket (excluding bonus/power numbers). It is usually the same as the draw-size, but sometimes lotteries will draw more numbers than you bet, like in many Keno games.
- Lowest: This is the first number in the number field of the game, usually 1 , but sometimes is 0 .
- Highest: This is the highest number that can be chosen from the main set of numbers in your game. Ex. 40, for a pick-6 from 1-40 numbers.
- Autosort Drawings: This check box is always checked by default because we do not enter our numbers in draw number. If you are keeping track of your own file, you can uncheck this to keep numbers saved in the order that you type them in the file.
- Bonus Numbers: This setting adds a separate number box from the main numbers drawn in the game. Ex. 1 because PA0640 draws one number in addition to the 6 main numbers.
- Hide Bonus Numbers: This allows you to specify if you see or hide bonus numbers in a file.
- Autosort Bonus Numbers: This, like Autosort Drawings, is always off by default, but you can change this for your own files.
- Bonus or Powerball Name: This is where you can specify the name of a bonus if a game uses something specific, like the Mega ball in Mega Millions or the Power Ball in Powerball.
- Powerball Type Game: This check box should be on if the bonus comes from a separate number pool, like Powerball.
- Low Powerball: This is the lowest number that the Powerball type bonus can be drawn from, usually 1.
- High Powerball: This is the highest number that the Powerball type bonus can be drawn from, which is usually different from the main number field.
- No Ballsets: This is usually the default for our files, but if you are keeping track of your own file and want to enter ballset information, you can use one of the other options.
- Use Alphabetic Ballsets: This will accept letters for the ballset, like D and N for Day/Night.
- Use Numeric Ballsets: This will accept numbers for the ballset, like 1 or 2 for the
early or late drawings when a game draws more than once per day.
- Reset: This option resets the Properties to the values that they were before you made any unsaved changes.
- Save: This will save your new settings for the file properties. Note: Using Lottery Updater to download the same file will overwrite these Properties.
- Cancel: This will cancel any unsaved changes you have made to the Properties.


## Enter New Game

What happens if your state creates a new game? For example, the "FLORIDA EASY LOTTO 6/40." We will most likely start tracking the game, so all you would need to do is download the new file from Lottery Updater (or let us know so we can start tracking it). However, if you want to set up your own game file for any reason, it is a simple process.

Go to File $\rightarrow$ New History from the menu. This will open the File Properties screen. You will need to fill in at least the following fields:

- File Name: Start the file name with your two-letter state abbreviation or three-letter country abbreviation, followed by a 4 digit number format which includes the pick-size and number field of the game. For this example, enter fl0650 (fl for Florida followed by 0650 for the $6 / 50$ game).
- Lotto Name: Write the name of your game. For our example, write "Easy Lotto 6/50".
- Starting: This is the date of the first drawing. Enter the date, or click the down arrow button next to the date field to open the calendar view to pick a date.
- Draw Size: This is also known as the pick-size of the game, or how many numbers the game will draw. For our example, choose 6 .
- Bet Size: This is how many numbers you bet. For our example, it will also be 6 , the same as the draw size.
- Lowest: This is the lowest number in the number field. For our example, it is 1.
- Highest: This is the highest number in the number field, or 40 in this case.

Click Save which will return you to the Modify History Screen with the first drawing edit box already ready for you to enter a drawing. Enter the drawing numbers.

Don't forget to click the Save icon when you are done.

## Editing the History

## Add a new drawing.

- $\boldsymbol{F}$ Lottery Website: To find the lottery's official game results in order to update with a new drawing, click the lightning bolt button. This will take you to the website we have saved for this game. You can also right-click on the icon to view alternate links, edit the links, and other options.
- When viewing your selected game's history from the main menu (Modify History screen), press ENTER to enter edit mode and a new drawing line will appear at the end of the history file. It will show the projected date based on the drawing days used the previous week. (If the date is wrong because of a missed drawing or a new drawing date, use the left arrow key and you can correct the date by using the up/down arrow keys or just type the corrected date as a 6-digit date. Press ENTER (or tab) if you changed the date to get back to the position of the first number of the drawing.
- Type in the winning numbers using two digits for each number. The program will automatically step through each entry, inserting the dashes between numbers. You can also click the down arrow button to view a number pad and select numbers with the mouse.
- Save: When all numbers are entered, the program will drop down to the location of the next drawing. Press ENTER again or hit the Cancel button if you are finished. Then hit the Save button or File $\rightarrow$ Save.


## Insert a drawing

If you need to add a missed drawing in between results, you can right-click and choose Insert $\rightarrow$ Insert Entire Drawing. Note that you can also add a drawing at the end of the history, with an older date, and it will automatically sort by date once you save the file.

## Edit a drawing

To edit an existing drawing, double click on the drawing to enter edit mode and update the numbers by typing over them or press the Clear button and then type the correct numbers. Note that only the Date and Numbers columns can be edited. The Day column will automatically display based on the date, and the other columns are stats that are automatically created based on each drawing.

## Edit file properties

[^0]fields, click the hammer Properties button. Note that edits made to the properties will be overwritten if you download our history file updates.

## Change Number Field

If your lottery adds more numbers to your game, click the File Properties icon. Then change the File Name to match the new number format. Ex. Change pa0640 to pa0645 if the game added 5 numbers to become a $6 / 45$ game. Right-click on the table under Structure Changes and choose Add Structure and click YES when prompted to make the change. Then on the left, change Starting to the date that the new number format took effect. Change the value of Highest to match the number field. Ex. Change the 40 to 45 . When you make these changes on the left section, they will reflect in the Structure Changes table on the right. Press the Save button to save your changes. If you right-click on a row in the Structure Changes table, you can also choose Delete Selected or Insert Before to add an older number format change.

If the number field is increased by only a few numbers, you may want to continue using the old data. It takes a long time for a new game to build history. Once there have been enough drawings with the new format, you can lock the Range to exclude the old number field results.

Note: Check LOTTERY UPDATER to see if we are already tracking the game under a new file name. In most cases, you won't need to change the number field yourself.

## Ballset/Rotations

This field will automatically be set up if we plan to use it in a game file. If we are not using this field, but you want to, you would need to start a new game file with a different name from ours and update it yourself so that our file does not overwrite your changes. You can choose No Ballsets, Use Alphabetic Ballsets, or Use Numeric Ballsets in the File Properties of a game. If ballsets were selected, you can turn them off this way as well. Note that if you do turn off existing ballset tracking, the ballset information already in the file will be lost.

## Add a New Drawing to the History

Updating the history yourself after each drawing is simple. Simply press the Enter key, and the drawing number, drawing date and day will appear automatically. All you do is type in the winning numbers (Single digits can be typed in without zero in front if you hit the space bar between each one entered). If you want to use the mouse to select the numbers, click the down arrow button to the right of the text box that will open when editing a drawing and a number pad will pop up. Then press Enter again or click OK to close the edit box, Clear to clear the numbers, or Cancel to cancel your edit.

Then enter the bonus number if your game has one. And then enter the Rotation, or Ball Set letter or number, if your state records that information.

On the rare occasion that the date is wrong because your Lotto changed its drawing dates or skipped a holiday, just use the Left arrow key to move back to the date and type in the correct date, spacing between each part of the date. Once you change a date, you may have to enter dates each drawing until a seven day pattern emerges again. If you entered a drawing and the wrong date was predicted, you can also change the date after you enter the numbers. Just double-click on the date and change the numbers.

When you are done editing, press the Save icon or File->Save History.

## Correct an Error

What happens if you make a mistake? How do you correct an error in the Lotto game history? very easily! Just double-click on the Numbers and the edit box will pop up for you to type over or Clear the drawing first and then type in the box.

To INSERT an entire drawing, right-click and choose Insert->Insert Entire Drawing Ins. This will pop up a new drawing line which you can fill in.

To DELETE a drawing, right-click and choose Delete->Delete Entire Drawing.

## Locate a Drawing Number or Date

You can locate any game by game number or date in an instant. Press CtrI+G or right-click and choose Goto Draw Number to find a drawing by draw number and type in the game number in the pop up window. Press Enter and the specified drawing will be highlighted on your screen.

To find a drawing by date, press CtrI+D or right-click and choose Goto Draw Date. Type or select a date in the pop up window that appears and press OK. The drawing you specified will be highlighted on your screen. If an exact match was not found, the first drawing after that date will be shown.

## Find Games With Specific Numbers

Press CtrI+F (the standard Find shortcut) or right-click on the window and choose FIND Lotto Numbers to locate a particular set of numbers, from one up to as many numbers as are drawn. A pop up window will appear with a number pad where you can select the numbers, or type them in the text box below. Select how many numbers you want to match. Click the Next or Find Next button to highlight the next matching drawing on the main Modify History Screen. The matching numbers will be displayed in bold font.

Click the Hit With button to bring up a Hits With screen that will display all of the found matches with the numbers you selected. You can also select the tabs for the other graph options
at the top to view the Hits With Graph or Skipped Graph.

## MENU OPTION 3: QUICK STATS

First, to follow our demo, from the main Modify History screen, make sure that our demo file, Pennsylvania $6 / 40$ is in the drop down box in the upper right hand corner of the screen, or select it if it is not selected. Then proceed to open chart 3 .

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 3 | Pick Chart (drop down) $\rightarrow$ <br> 3. Quick Stats <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ 3. Quick <br> Stats | 3 |

## Purpose and Overview

QUICK STATS gives a brief overview of general information about the past performance of each lotto number by showing statistics about skips (games out). It also helps you pick long shot numbers by telling you which numbers are out longer than the average skip pattern.

For each Lotto number on the far left column, it tells the following information:

- Out: the number of Games Out or skipped since the last hit.
- Out/Med: the Games Out/Median ratio, which is the ratio of current number of games out to the average number of games out (note: you can change this column to Out/Avg by right-clicking and selecting that option from the pop up menu).
- Longest: the Longest Skip period for each Lotto number during the selected Range.
- L10: the number of times a number hit in the last 10 most recent drawings.
- L5: the number of times a number hit in the last 5 drawings.
- Last: the Last Skip or number of games skipped before the previous hit.
- Avg: the Average of all skip periods for each number. A single extremely long skip period could change the average significantly.
- Med: the Median Skip (middle skip), or the point at which half the skips are higher
and half are lower. This isn't affected by extremely long periods.
- Std Dev: the Standard Deviation of the skips for each number.
- Exp Hits: the Expected Hits, which are the number of hits each Lotto number would have if each Lotto number had an equal number of hits.
- Hits: the Total Hits, which is the actual number of hits for each Lotto number.
- Hit Ratio: the Hit Ratio is the percentage of Hits compared to the Expected Hits. $100 \%$ is exactly on the expected value.

Notice the Smart Pick asterisks in the first column on the left next to some of the numbers, 03*, 08*, 10*, 14* and 15*, etc. are all starred as Smart Picks.

The Range of Drawings that are included in the chart is shown at the bottom center of each chart next to the range button, "Range: 1 to 621 (04-16-02-2/15/08)", in this example.

Click the Hits column to sort by the total hits. This will show the top number as \#26 with 126 hits. Number 36 will be last in the list and it shows a total hits of 82 hits. So the top hitting number here, as in most lotteries, has hit more than a third more often than the least hitting number.

Close the chart: Press the $x$ in the corner or ESC key to close the chart and get back to the Main Menu, or press the selector menu.

## Most Important Part About Chart 3

In all lotteries, the position of numbers in this chart tend to remain close to the same rank especially the top and bottom numbers. In the Florida Lotto (pick-6 game), for example, the top hitting number, 28, was the top hitting number for more than 600 drawings. If you look at the entire 621 games of the Pennsylvania dead lottery, it will show that 26 was the top number for 319 drawings. That doesn't mean the top numbers will hit in every drawing or that you should include them in every drawing. But you should strongly consider the top 10 numbers in each drawing as candidates, and definitely avoid the bottom few numbers, unless you have a good reason to use them. Choose long shot numbers with the highest Out/Med ratios.

## Using the Chart Statistics

Column sorting can come in handy for this chart. Don't forget, all you have to do to sort the data by the column heading is click the column heading. It will be highlighted with a blue to yellow gradient if you are sorting by highest to lowest. Click again to reverse and sort by lowest to highest (highlighted by a yellow to blue gradient).

You can compare the values with the average for all numbers, which is the bottom row of the
chart, to see how much above or below the average the number is performing for each column's data.

Sort by Out (click the Out column heading) to shuffle the Lotto numbers from most games out to the least games out. Now you can see easily which numbers are out the longest. Lotto number 25 is the number out the most games. It has skipped 29 drawings since the last hit. Lotto \#24 is out 21 games. Lotto \#20 is out 19, and so on. All of the numbers at the bottom, with 0 games out means they hit in the most recent drawing.

Sort by Out/Med to see the numbers with the highest ratio of losing games to the median skip period. It's a more scientific way of choosing the long shot numbers than simply playing a number because it is out the longest. Notice that Smart Picks chose numbers 24 and 26, but did not choose 25 , the longest number out, nor 20 or 27 . You should not play all numbers with a high out/Med ratio, but you can give them all special attention by studying their patterns on other charts and then choosing those with strongest patterns elsewhere.

Sort by Longest (Longest Skip) to see the numbers with the longest losing streak, or the greatest number of losing games uninterrupted by a win. The longest skip period since the beginning of the PA Lotto $6 / 40$ game was 47 losing games. And Lotto \#35 was the unlucky winner of that distinction. Lotto \#33 was the second biggest loser, with 46 skips in a row. \#18 had a 40 -game losing streak. Chasing a long shot number because you think it's "due" can be very costly. Some numbers can skip 100 drawings without a win!

Sort by $L \mathbf{L 1 0}$ to see which numbers had the most hits in the past 10 drawings.
Sort by $\mathbf{L 5}$ (In Last 5 Games) to see which numbers had the most hits in the past 5 drawings.
Sort by Last (Last Skip) to see the games out value each number had before its last hit. You can compare this with the current Games Out value and see how the number has recently been trending. If it has been having much longer skips than its average skip, it may have some catching up to do and could be a number worth watching.

Sort by Avg (Average Skips) to see which numbers had the highest and lowest average skip values. For example, Lotto numbers 1 and 36 have one hit for every $6-1 / 2$ drawings skipped. Scroll to the bottom to see that \#26 wins far more often. 26 has one hit for every 3.8 games skipped.

Sort by Med (Median Skip) to compare median skips. When the Median and Average Skips are nearly the same number, the chances of it hitting at that number are even better.

Sort by Std Dev (Standard Deviation) to see the numbers with the highest standard deviation between skips. When applied to lottery combinations, it sorts combinations by how much the numbers in the combination vary from the average of those numbers. Combinations with the lowest and highest Standard Deviation are rare while combinations with mid value scores are much more common. Standard deviations form a very clear bell curve that is much narrower than the bell curve of the sums. Typical scores range from about 3 to about 26 .

Sort by Exp Hits (Expected Hits) is the number of hits each number would have had, if all numbers had hit an equal number of times. If you compare the actual Hits with the Expected Hits, you can see if a number is hotter or colder than normal.

Sort by Hits (Total Hits) to see the numbers with the highest number of hits for the hottest number since the game began. \#26 is the all-time winner with 126 hits. \#19 is second with 123 hits. Scroll to the bottom to see the low hitting numbers. Notice that \#36 is this game's coldest number, with only 82 hits to its credit. This is one of the most useful columns. Numbers that hit more often tend to keep doing that as do numbers that hit less than normal. The top 10 or so numbers need to be considered strongly when picking your numbers. When you go to the bottom of the sorted page, the coldest (or least hitting) numbers also need to be considered as numbers to avoid mostly. This information is not enough by itself to determine which numbers to play or avoid but it is a very useful first step.

Sort by Hit Ratio to see the numbers with the best percentage of actual hits to expected hits. Average performing numbers show 100 percent. Hotter numbers have a higher percent than 100 . The lower the percent below 100, the colder the number. Trying to determine the relative activity of numbers is difficult when looking only at each number's hits. This "normalizes" the hits so you can see at a glance which are the more active numbers. The numbers with the highest ratios are usually better plays than those with the lowest ratios. All-time hottest \#26 has a Hit Ratio of 115.9 percent, and the all-time coldest \#36 has a Hit Ratio of only 75.5 percent.

## Smart Picks

This is the first chart that produces Smart Picks, the automatic number picks. The Smart Picked numbers on this chart are starred with an asterisk. The Lotto numbers are listed down the left side of the page in the first column. The star, or asterisk, just to the right of some of the Lotto numbers means that those are the numbers chosen by the chart as Smart Picks. In this example, numbers starred with an asterisk are $3,8,10,14,15,16,17,24,26,28,31,37$, and 38.

## Using Range Settings and Drawing Rollbacks

## 13 क a \%

You can use the new arrow buttons at the bottom of each chart to quickly change the range. Click the back arrow button or press the Minus key on the keyboard, '--' to roll back the history by one drawing - i.e. the last drawing is removed from consideration. The range shown will change to "Games 1 to 620 ." Notice that the numbers $+02^{*}$, $+04,+06,+19^{*},+21,+34$, and +35 all have the + to their left. This shows the numbers that were drawn on the drawing just past the last used by the chart. It's a peek ahead. On this page, the numbers with a plus and an asterisk are Smart Picks that were correct, $+02^{*}$, and $+19^{*}$. Numbers with the asterisk but without the plus are Smart Pick numbers that did not hit, 10*, 14* and $15^{*}$. Numbers without an asterisk but with the plus sign are numbers that were missed by the Smart Picks, like +06 .

If you look at samples of 10,000 coin tosses, you would expect the results to be very close to $50 \%$ in just about every sample. If you look at just 100 tosses, you would see $40 \%-60 \%, 30 \%$ $70 \%$ and many other arrangements of the results. The $50 \%-50 \%$ split would be no more likely that the others. This would give you a current trend to help in predicting the next results. Lotteries are the same. The results are just spread over more points - one for each number. If you
include enough drawings, there would be little difference in the statistics for any numbers. It would hide the most recent trends making the information just about useless.

At the bottom of most ADVANTAGE GOLD charts, is a Range Function that allows you to change the drawings that are included in the calculations for the chart. This does not affect the contents of the file, just what is visible to the calculations.

If your history contains much more than about 500 drawings, especially for pick- 5 lotteries, you can change it to use only the most recent 500 drawings. This is recommended for most charts - especially pick-5 lotteries.

To change the range, click the Range button $\mathbf{R}$ or the text that displays the range. The Set Range screen will pop up. To change the range to use only the last 500 drawings, click the check box next to Use FIXED range of and type 500 in the box. Click the $\mathbf{O K}$ button. The chart will now be based on only the most recent 500 drawings. The Range message will show Games 122 to 621 . If you press the back button or '-' key now, the range will change to Games 121 to 620 , i.e. it will rollback the starting and ending positions, keeping the 500 game range. You can also use the Set Range screen to specify any starting or ending draw number or date. To keep the setting, hit the check box next to Save Starting Draw in file.

## Option 3a. Total Hits Graph

To access this sub-chart, from Chart 3, click the tab at the top for 3a. - Total Hits Graph. This is a graphic view of the total hits, which is a new graph that was not included in the old ADVANTAGE PLUS software.

Total Hits Graph is a bar graph that displays the total hits for each number, and has an expected hits blue line across the graph, so you can compare which numbers have hit more or fewer times than expected. Sometimes it can be helpful to view these statistics visually to see how far out of line a number is performing.

The graph is automatically sorted by whichever statistic that you were sorting by in Chart 3. It will show the current sort method at the bottom left of the graph. Go back to Chart 3 to choose a different sort method, or click "Number of Hits" text along the left side of the graph to sort by lowest to highest hits, or click the line at the bottom that mentions the game name to sort by lotto number.

You can also click the small graph icons at the top icon menu to switch to a line chart, area chart, or other option. Right-click on the graph to view more graph display options.

## Option 3b. Hits, Games Out \& Skips Graph

To access this sub-chart, from Chart 3, click the tab at the top for 3b. - Hits, Games Out \& Skips Graph. This shows the graphs of the five most useful statistics, which are new graphs that were not included in the old ADVANTAGE PLUS software.

You can view individual graphs for Average Skips, Median Skips, Longest Skip, Games Out, and Total Hits. It can be sorted similarly to Option 3a. - Total Hits Graph.

## MENU OPTION 4 DRAWINGS SINCE HIT CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 4 | Pick Chart (drop down) $\rightarrow$ <br> 4. Drawings Since Hit Chart <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Medium Term Charts $\rightarrow$ <br> 4. Drawings Since Hit Chart | 4 |

## Purpose and Overview

MOST IMORTANT CHART: The Drawings Since Hit Chart is the most valuable chart in the program. It tells you when to play-and when not to play-specific numbers for specific drawings. You should never play Lotto without it. All you need is the last 50 or 60 drawings, which makes this one of the best charts to use in new games, also.

Drawings Since Hit Chart reveals at a glance the recent past action of all the numbers. It shows how many losing games have taken place between wins for each Lotto number and gives an instant reading of which numbers are hot and which are not. You can tell immediately how the numbers are hitting, which numbers are on a hot streak, which numbers are cooling off, which numbers are Long Shots, which numbers have been out the longest, and much more.

Learn to recognize the patterns described here. They occur over and over with almost predictable results. Smart Picks do not recognize all the patterns in this chart. Spend whatever time it takes to learn the distinct patterns. No other chart will reward you as greatly.

The Drawings Since Hit Chart shows how many losing drawings have taken place between wins for each of the Lotto numbers. It gives you an instant reading of which numbers are hot and which are not. A quick glance at this chart will show you the recent past action of all the Lotto numbers, such as how often the various numbers are hitting, which numbers are on a hot streak, which numbers are cooling off, which numbers are long shots, and so on. It's a fast, convenient way to track the numbers. The object of this chart is to help you pick your numbers based on very specific patterns.

The Lotto numbers are listed across the top of the chart. The drawing numbers and dates run down the left side of the chart. A "\#\#" sign means a hit. A "bn" for Bonus Number means a winning number won as a Bonus Number. Click the $\boldsymbol{B}$ - icon in the toolbar at the top to turn off Bonus numbers. In Powerball type games, hits as a Powerball are shown as "pb" for Powerball (the toolbar icon in this case would be $\boldsymbol{P}$ - to turn off the Power ball numbers).

The numbers in between the \#\# signs are the number of drawings skipped since the last hit. A Hit is the same things as a win, and Skips means losing games.

## Most Important Point about Chart 4

You can see at a glance the recent activity of each number. Using this along with chart 3 helps you find which of the most active numbers to play or not play and when to play the most inactive numbers. Of course, that is not an exact science, but it is usually more fruitful than doing nothing. You can also see connections between numbers, like when 5 plays in one drawing and 6 plays in the next. Often, these connections seem to repeat frequently enough that it is worth playing the next one when the first one hits, unless it just did that the previous time.

This chart should be cross referenced with all other charts (especially Charts 5 and 6) to confirm whether or not a certain number is the best bet for the next drawing.

## Example for Reading Chart 4

This is how to understand the data displayed in the chart. In Game \#607 of PA0640, drawn on 12/28/1987, Lotto \#1 was a winner. \#1 was a winner in the next game, too. Then it skipped one game and hit again, skipped another game and hit, this time as a Bonus Number. Then \#1 skipped seven drawings before it hit again in Game \#620, drawn on Feb. 12, 1988. Now it is out one game, which brings us to the last game drawn before the Pennsylvania 6/40 Lotto game ended, and was replaced with a new 6/48 Lotto game.

We explain in detail how to zero in on winning numbers by cross referencing various charts in the chapter, "Smart Luck Secrets for Winning". But, please continue reading this manual so you will become familiar with each chart.

Tooltip Hints: Don't forget, if you have tooltip hints turned on, you can hold the mouse over any cell or column heading to see a summary of the information or a specific explanation of what you are seeing in context.

## Number Patterns to Look For

Patterns can be seen in the Drawings Since Hit Chart which can be used to great advantage. By studying the flow of number activity, you can learn a lot about winning (and losing) patterns. The wonderful thing about this chart is that it does NOT require much game history to be of value. It is the most useful chart you can use in new Lotto games that have had only forty or fifty drawings or so.

These are some of the important patterns you should look for and memorize in your game: Technical Corrections, Lotto Trend Reversals, Cascades, Reverse Cascades, Hot and Hitting Numbers, Exhaustion Breaks, Double Bottoms, Triple Bottoms, and other patterns.

## Technical Correction

After a long losing streak, a number finally hits. That means nothing. It could be just a Technical Correction-which is an insignificant reverse blip in a trend. Often a long dormant number may have a Technical Correction of one win before resuming its downward trend. It's not uncommon for a Lotto number to lose 25 games or more, hit once, and then lose another 20 or 30 games.

## Trend Reversal

The Trend Reversal will tell you when a long time loser is ready to become a hot and hitting number. When a Lotto number has been inactive for a long time, it's often difficult to predict when the losing streak will end. But once it finally does hit, a dormant number will confirm a Trend Reversal IF THE HIT IS FOLLOWED BY ANOTHER HIT WITHIN THE NEXT FOUR DRAWINGS. Two hits in rapid succession, without more than three games skipped between the two hits is a clear signal of a Trend Reversal, and, in most cases is followed by a winning streak (four losing games between hits usually end up as a Technical Correction). Some examples of Trend Reversals in the PA0640 are: Lotto \#22 had lost 18 games as of Game \#596 and won six times within the next fifteen games; Lotto \#35 had lost 22 games as of Game \#585 and won five times within the next thirteen games.

## Reverse Cascade

Another type of a Trend Reversal is the Reverse Cascade, which shows how you can spot a Hot Number just before it gets hot-so you can be on it before it starts its winning streak. Look for increasingly shorter skip periods between wins. This usually indicates that a Lotto number is attempting to end its downward trend, and become a Hot Number.

Let's say a number had skipped 27 games, and hit, then skipped 12 games, and hit, and then skipped 7 games. We would play it at that point, anticipating that the number would hit again before it was out as many games as the last skip, which was 12 . If it did hit then, it would fulfill the three stage requirements of a Reverse Cascade and could become a Hot Number. So we would continue playing it for the next several games. Examples of Reverse Cascades in the PA0640 are Lotto \#3, out 20 games on Game \#587, then skipping eight games, then two. Also Lotto \#29, out 29 games on Game \#604, then skipping seven games, then one game.

## Cascade

The cascade shows how you can save money by being able to tell when a number is about to start a long losing streak-before it loses 15 or 20 games or more. As opposed to a Reverse Cascade, the Cascade is increasingly longer skip periods between wins. For example, a number could skip five games, and hit, skip 12 games, and hit, and then skip 20 or 30 games. There are usually three skip periods in a Cascade, sometimes four. The last skip of a Cascade is the Exhaustion Break-a dramatically longer skip period than the two that precede it. The standard Trend Reversal of two hits with three skips or less between the two hits marks the end of a Cascade pattern. After that, the number usually gets hot. An example in the PA0640 game is Lotto \#33, which had a repeat hit, then skipped 10 games and hit on Game \#520 then skipped 46 games and hit on Game \#567. It quickly made up for losing time by winning nine of the next 29 games.

## Hot and Hitting Number

Just how far can you expect to ride a Hot and Hitting number before it nose dives with a long losing streak? A number can have short hot streak with as few as three wins before it takes a rest. A realistic hot streak for a Hot and Hitting number could be six hits before skipping more than three games between each hit. But many numbers have had seven, eight or nine wins before taking a rest of four or more games. In the Canadian 6/39 Lottario, \#28 had a record 15 wins without skipping more than three games between any two hits. But don't look for that to happen often. It was the ultimate-the record hot streak in that game. And Lotto \#35 had a Hot and Hitting streak of 13 games.

This can vary with the number field of a game. The smaller the number field of a Lotto game, the greater the possibility of having a longer Hot and Hitting winning streak. Conversely, in a Lotto game with a larger number field, such as a 6 out of 49 or 6 out of 54 , the Hot and Hitting winning streaks would occur less often and be of shorter duration. For example, in the German Lotto 6/49, a long Hot and Hitting streak could be a series of six hits, although Lotto \#39 in that game had a series of 12 hits without losing more than three games between each hit.

Use your analytical faculties and common sense when you study this chart. If, for example, you see a number has had five or six hits with only one or two skips between each hit, and then the number skips eight or nine games, you can assume that the number had finished its hot streak and had begun a well deserved rest. So, you would avoid playing such a number until it makes a new pattern.

## Double Bottoms

Double Bottoms occur when a number, which has not hit for several drawings, hits, then loses an equal amount of drawings and hits again. For example, a Lotto number could skip eight drawings, hit, then skip another eight drawings and hit again. The second skip that forms the Double Bottom can be one off, that is, in this case, either seven, eight or nine, and still conform to the Double Bottom pattern. A Lotto number can be bet anticipating a Double Bottom to occur. On just the last printed page of the PA0640, from Game \#567 I see at least 25 examples of Double Bottoms. Lotto \#23, has a Double Bottom of 15, Lotto \#36 has a Double Bottom of eight. See if you can find the others.

## Triple Bottoms

There are also Triple Bottoms and Quadruple Bottoms, Quintuple Bottoms, even Sextuple Bottoms. The more times a number tests an area of support, the stronger that support becomes, and the more likely it is that the number will get hot. However, once that area of support is penetrated on the downside, the number could be in for a long losing streak. Using our previous example, where the Double Bottom is Eight, if the number skips 10 games, it would have confirmed that support was broken, and we could expect the number to be out for a long time.

In the PA0640 game, Lotto \#15 has a Triple Bottom of five between Games \#585 and \#597. Lotto \#19 has a Quadruple Bottom of five between Games \#526 and \#544.

## Smart Picks

The Smart Picks chosen for that game are starred with an asterisk. If you move the Range back one drawing, there is a Plus sign just to the left of the numbers that won in the next game. So, the numbers that have both a star and a plus are the winning numbers that were correctly selected from that chart by Smart Picks. For example, Smart Picks chose 15 numbers in Game \#620 and got four correct. They were numbers 2-4-19-35.

NEW: If you hover the mouse over a Smart Pick number in this chart, the tooltip hint will explain what pattern the program used for selecting the number.

## Option 4a. Abbreviated Drawings Since Hit Chart

To access this sub-chart, from Chart 4, click the tab at the top for 4a. - Abbreviated Chart, or type the $\mathbf{2}$ number key.

This is a condensed (or abbreviated) version of the Drawing Since Hit Chart. The Abbreviated Drawings Since Hit Chart shows the most recent drawings on the
screen. This shows the results of many more drawings and can be much easier to spot patterns than the base chart. All the patterns described for the base chart can be identified more easily in this version.

The Lotto numbers are listed down the right side of the screen in between the Hits and Games Out columns, and the drawing results of each game shows across the screen and will continue to older drawings if you scroll to the left. On the chart, each column down the page is a drawing with the most recent drawing on the right. The numbers at the top are every other drawing number. On the lines, each dash ( the '-' mark) represents a drawing in which the Lotto number on that line was not drawn. A drawing in which a number hit is marked with an ' $X$ '.

If your lottery has a bonus number, the hit in the bonus position will be shown with the letter ' $a$ '. If the number hits as both a normal number and as a bonus number, it will show as a ' $\boldsymbol{d}$ '. This can only happen in Powerball-type games and really should not happen. You should turn off the Powerball in these games by clicking the $\boldsymbol{B}$ - button in the top of the chart so that the top right will show Bonus OFF.

Each ' $=$ ' mark on the right side of the chart shows the number of drawings each number is currently out. This can be confirmed by the number under the OUT column. The equal signs highlight visually the current run of drawings in which the number has failed to hit. It's shown that way only to call attention to the open span of misses.

The next column, is a listing of the Lotto numbers. The HITS column shows as a number above or below the expected hits. Negative numbers have hit less than normal and positive numbers have hit more than normal. Hold the mouse over the cell and it will show the hit ratio (from chart 3) for that number.

Hold the mouse over the column heading at the top to see the numbers drawn for that date. Hold the mouse over the dashes between hits to see how many drawings are represented by the dashes between the hits. You don't have to count them.

Notice on the right that Lotto \#1 has one equal sign, which means it skipped one game since it last hit, the hit being marked with an ' $X$ '. The seven dashes before the last ' $X$ ' means it had skipped seven games. And before that, it had hit as a bonus number, marked by an 'a'.

Use this chart to project the patterns made by the wins. For example, in this PA 6/40 chart, you might choose Lotto numbers 5, 20, or 29 because they form a continuation pattern in the chart. Or you might anticipate a large gap area being filled in, and select some numbers between 8 and 16 , or between 24 and 29. After you've made your selections from this chart, see how those numbers look on other charts. This is just one more tool you can use to help refine your number picks. You might also discover a sleeper that hadn't been obvious in other charts. This chart can be particularly useful in helping you decide which long shot numbers to play.Option $4 b$. Numeric Drawings Since Hit Chart

To access this sub-chart, from Chart 4, click the tab at the top for 4b. - Numeric Chart. In the old ADVANTAGE PLUS, this sub-chart was called Drawings Between Hits Chart.

The Numeric Chart is another way of looking at the Drawings Since Hit material.

It gives far more data on one page than either of the other two charts because it shows in numeric form the number of drawings skipped between hits. Like Chart 4a, this chart is read from right to left with the most recent history on the right.

You can see many skip periods for each Lotto number. The columns on this page represent the games out of each number when it hit. The 0 column is the current games out for each number. Column 1 shows how many drawings had been skipped for each number when it last hit.

## MENU OPTION 5 MULTIPLE HIT PATTERN CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 5 | Pick Chart (drop down) $\rightarrow$ <br> 5. Multiple Hit Pattern | 5 |
| or | Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ 5. Multiple <br> Hit Pattern |  |

## Purpose and Overview

Multiple Hit Pattern Chart tells you which of the Lotto numbers that came up in the last drawing are most likely to repeat with another hit in the next drawing. This is a very useful chart, if there is enough history for the patterns to have formed-at least 100 drawings.

Only the winning numbers from the past drawing are considered, which are shown in bold, in the first column, under \#\#.

The majority of Lotto drawings have at least one number repeated from the previous drawing. Very few games have had a number hit more than five times in a row. In PA 6/40, 82 percent of the drawings had at least one number repeated from the last game, and only five numbers hit five times in a row. Even four consecutive hits don't happen that often. So, according to mathematical probability, you would certainly want to avoid playing a number that had already had three hits in a row.

The All Hits column shows the total number of hits for each lotto number. The other Hit
headings across the top of the chart are for how many hits in a row, like once, twice, etc. For example, Hit 1 Time means a Lotto number had one hit that was preceded and followed by losing games. The last column shows the Double Hit Ratio, or the ratio of single hits to multiple hits.

The Multiple Hit Pattern Chart shows how many hits in a row you can reasonably expect from each Lotto number. Sort the information by the different column headings to see which numbers hit the most times once, twice, etc in a row.

The bottom row of this chart shows the AVG (average) for each column.
PLEASE NOTE. THIS IS VERY IMPORTANT. Multiple Hits are not recorded on this chart until the multiple win is ended with a losing game. A number could have one or more hits in a row, but we won't know how many that will be until the winning streak is ended with a losing game.

## Using the Double Hit Ratio and Average

To find which of last week's winning numbers are most likely to be drawn as winners this week, refer to the Double Hit Ratio in the column on the extreme right of the chart. The Average Double Hit Ratio for your game is shown at the bottom of the Double Hit Ratio column. New Lotto games that have little historical data, generally have wider swings and higher Double Hit Ratios, but you can still compare to the average for that particular game. Half of the numbers will be higher than the Average Double Hit Ratio, and half will be lower. It's always interesting to compare with the average to see how far out of line, either way, a number is.

Click on Double Hit Ratio twice to sort from low to high. In PA 6/40, the highest ratio was 7.3 and the lowest was 2.7, and the Average Double Hit Ratio is 4.2.

The Lotto numbers that have a Double Hit Ratio lower than average are the best to play for a repeat hit (two wins in a row) in the next drawing. In PA 6/40, a number with a Double Hit Ratio of lower than 4.2 is a good bet to play for two drawings in a row. For example, \#26 has a ratio of 2.7, which means it averages one Double Hit for every 2.7 single hits it has, so it is much more likely to hit two games in a row than $\# 10$, with a ratio of 7.3 or one Double Hit for every 7.3 single hits.

## Smart Picks and Other Good Bets

In PA 6/40, Smart Pick numbers (*) are only numbers 2 and 4. There are two exceptions when numbers other than the Smart Picks should be played for a Repeat Hit:

1. A long shot number that has been out more than 30 games may end its long losing streak with two hits in a row, no matter what its Double Hit Ratio is. The longer the losing
streak, the more likely the number will try to make up for the losses.
2. Another candidate for a Repeat Hit is one with a recent trend of repeat hits. It may do it again in spite of its Double Hit Ratio.

## Option 5a. Repeat Numbers Summary

To access this sub-chart, from Chart 5 click the tab at the top for 5a. - Repeat Numbers Summary. This chart tells you how many games in a row from zero to 8+ repeat numbers have been drawn, as well as the total and percentage.

You read the chart this way (PA 6/40 example). There were 70 single instances of games occurring that contained no repeat numbers. There were 12 instances of two games in a row that contained no repeat numbers. And five instances of three games in a row with no numbers repeated. This is a total of 112 games out of the 621 that had no numbers repeated, which is 18 percent.

There were 97 single instances of ONE game occurring that contained one repeat number. There were 36 instances of TWO games in a row that contained one repeat number, 12 instances of THREE games in a row with one number repeated, 7 instances of FOUR games in a row that contained one repeat number, and one instance each of $5,6,7$, and $8+$ times in a row. There was a total of 260 games with ONE repeated number, or $41.9 \%$ of all drawings.

## Option 5b. Repeat Numbers Projection

To access this sub-chart, from Chart 5 click the tab at the top for 5b, - Repeat Numbers Projection. This chart predicts what is most likely to happen in the next game, based on past history.

In PA 6/40, Game \#621 had no numbers repeat from the previous game. This has happened 112 times in the past ( $18 \%$ of the time). The game has an average of 1.3 repeat numbers per drawing. Looking at the chart, you can see the bold column for the relevant information, what happened most often after a drawing with no repeat hits: 1 repeat hit was most co0mmon, happening 48 times. A game with no repeat numbers had happened next most often.

You can hit the check box next to \% to change the numbers in the chart to percentages, which is usually easier to compare.

At the very bottom of the chart window is a chart which shows how many repeat hits each drawing had for the most recent drawings, so you can look for patterns.

## MENU OPTION 6 SKIP AND HIT CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 6 | Pick Chart (drop down) $\rightarrow$ <br> 6. Skip \& Hit <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ 6. Skip \& Hit | 6 |

## Purpose and Overview

Skip and Hit Chart shows how to tell which of the numbers that did NOT hit in the last drawing have the greatest probability of being drawn as winners in the next drawing. Lotto numbers hit most often after skipping a certain number of games which is recorded in this chart.

Keep in mind that whereas the Multiple Hit Pattern Chart is used only for the numbers that WON in the last drawing, the Skip and Hit Chart is to be used only for the LOSING numbers of the last drawing. Use this chart to determine which of the numbers that DID NOT hit in the last drawing might be winners in the next drawing. Both Chart 5 and Chart 6 can be two very effective tools when there is sufficient data.

The patterns in the Skip and Hit Chart are reliable only when there have been a substantial amount of drawings, which varies based on the number field. A $6 / 54$ game needs at least 400 drawings to have reliable patterns, but a small $5 / 26$ game fills in with less than 200 drawings. One way to tell if there is sufficient history is if there are any double digit hits showing on the chart.

This chart probably looks intimidating at first glance, but it will often help you pick a couple of correct numbers. It shows in columns the number of times each lotto number hit after skipping one or more drawings. In other words, it records the number of times each lotto number has won after losing a specific number of drawings between wins (or hits at each games out value). We count the number of consecutive Skips as the total amount of losing games between two wins. The Skip period starts AFTER the last win and does not end until the next win. A Skip period cannot be counted until a win brings an end to the losing streak. So, a Skip period starts
and ends with a winning game.
NOTE: Losing games are NOT recorded on the Skip and Hit Chart until the losing streak ENDS with a winning game. A number could be out one game, or it could be out one hundred games, but we won't know exactly how many until the losing games are ended with a win.

The object of this chart is to tell you when to play-or when not to play-specific Lotto numbers for specific drawings, based on a number's Skip pattern.

To use this chart, we are looking at the following:

1. The \#\# or Lotto number itself.
2. The number of drawings it is currently OUT.
3. How the Lotto number has performed in the past after being out that many drawings (the bold blue number is the hits at the current games out value).
4. How the number's current games out performance compares to the AVG (average) of other numbers' hits at the current games out value.

The numbers ( 0 to 35 and Beyond 35) in the heading across the top of the chart indicate the number of drawings skipped between wins for all the Lotto numbers. The numbers inside the chart tell you the number of times each Lotto number has hit after skipping one or more consecutive drawings between hits.

It is necessary to know how many drawings a number has skipped since it last hit-which is the number of games out, in the OUT column right next to the Lotto numbers. We can then compare the hits a number previously had at its current games out value to its hits in other skip periods as well as the AVG or average hits at that games out value, to see if it is likely to hit again in the next drawing.

A Lotto number's skips should also be compared to the number of skips of other Lotto numbers in the same column of the chart. In other words, compared to the average of how other Lotto numbers have performed after skipping the same amount of drawings. The AVG row at the bottom of the chart shows the averages of each column.

The most important thing about Skip and Hit Chart ${ }^{\text {TM }}$ is what happened in the most recent $\boldsymbol{F I V E}$ drawings, the five columns at the left of the chart. Play a number when there is a spike at the current games out for a number (especially above the average) but also when there is a serious void or much lower than the surrounding bars.

Notice in the Skip and Hit Chart that the highest numbers are on the left side of the chart. As we move across toward the right, the numbers become smaller, or are empty spaces. The Lotto numbers out for the shortest time account for most of the wins. As more drawings are
skipped between hits, the number of hits generally decreases for all Lotto numbers. But in cases where the number of hits increases, this indicates a significant pattern which should be played. That is the key to using this chart.

If there were no patterns in this chart, the highest number would always be in the first column on the left, and the numbers in each column after that would be progressively smaller. The higher the numbers are as they move away from the left side of the chart, the more significant the patterns are. A pattern is more significant if a Lotto number has hit eight times after skipping six drawings than if it hit eight times after skipping only one or four drawings. Or, a Lotto number having hit seven times after skipping ten drawings would be far more significant than had it hit eight times after skipping four drawings.

## Recognizing the Patterns: Examples

Using our example history file, PA 6/40, we would like to point out some things to consider and examples of good and bad number picks.

- Lotto \#1 is OUT one game since it last hit. We would usually recommend playing \#1 usually when it has just hit or when it has skipped one drawing, but you do need to check recent activity in Chart 4A to be sure this isn't a repeat of the last action. In this specific case, the number is currently one game out and so by itself, this would recommend it to play. Chart 4 shows the preceding hit was 7 games back, and so it really doesn't help, however, in Chart 3, we see that this is the second least hitting number at the very bottom of the chart. That would overrule the Chart 6 recommendation, and consequently, we would not recommend playing number 01 in the next drawing.
- Lotto \#2 hit on 17 different occasions after skipping three games. Lotto \#2 has a strong pattern of hitting after skipping 3 games. So, if Lotto \#2 were out 3 games, we would certainly play it. However, Lotto \#2 is out zero games which makes it a winning number, so we would use the Multiple Hit Pattern Chart, NOT the Skip and Hit Chart, to see if 2 would hit again in the next drawing. Keep in mind that the Skip and Hit Chart is to be used ONLY for the losing numbers of the last game.
- Lotto \#15 has hit on 13 different occasions after skipping six drawings which means it would be good to play at a games out of 6 . But it has hit only six times after skipping four drawings, so you wouldn't want to play it when it's out four games, since there are two higher hitting games out periods immediately after it. The fact that it has hit on 11 occasions after skipping five games is far more significant than its 11 hits after skipping three games.
- Lotto \#16 is a good example of a strong pattern, since it is currently 2 games out and has 16 hits at games out of 2 , which is higher than the hits before ( 15 at games out 1 ) and after ( 9 at games out 3), and above the average of 13 for all numbers at 2 games out.
- Lotto \#18 has a theoretically correct pattern, at least for the first six skips. Notice the descending numbers: 21-16-11-7-4-2. After that, the numbers increase and that is where you see patterns that can be helpful.
- Lotto \#28 hit only eight times after skipping five games, which appears to be a low skip number on that line. But look at the AVG for that column at the bottom of the page. It's only 7, so Lotto \#28 would still be a decent number to play if it were out five games because it is above average for five games out.


## Smart Picks

For the next drawing, 17 numbers qualify as Smart Picks (*). But, some are better bets than others. For example, \#11 is a better bet than 38 . This chart treats all the Smart Picks equally. Either you must include all those numbers in your wheel, or else use your judgement to eliminate some. Keep this in mind as you look at the Smart Picks on this chart and others for your own Lotto game. Generally a Smart Pick with just two occurrences can be eliminated.

## Option 6a. Individual Number Graph

To access this sub-chart, from Chart 6 click the tab at the top for 6a. - Individual Number Graph. This bar graph gives you a quick visual profile of each number's skip pattern, based on the data in the Skip and Hit Chart.

The Lotto number is located at the top left corner of the chart and also in the chart at the top right, along with the number of games out and other information about that number. Across the bottom of the chart you see the number of games skipped, from shortest to longest. The scale on the left side of the chart shows the number of hits. The bars indicate the number of hits after particular skip periods.

In PA 6/40, for the $\# 01$, you can see that this number hits much more often after itself or after skipping one drawing.

Press the Up or Down arrow keys to quickly switch from one Lotto number to the next, or use the mouse scroll wheel or vertical scroll bar on the right. You can also double click a number from Chart $\mathbf{6}$ to switch to the $\mathbf{6} \mathbf{a}$ graph for that number.

## MENU OPTION 7 HIT CHARTS

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 7 | Pick Chart (drop down) $\rightarrow$ <br> 7. Hit Charts <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ 7. Hit Charts | 7 |

## Purpose and Overview

Hit Charts shows the number of times each Lotto number has hit within a given time period and gives the rank and hit ratio for each Lotto number. The numbers with the most hits are at the top of the chart, and those with the fewest hits are at the bottom. By comparing charts over different time periods, you can see which numbers have become more active or less active within the overall trend-and which numbers are still hot.

Four Hit Charts can be seen on your screen at once, the All Time Hit Chart which shows in the title the total number of drawings in the Range of your game, the 50-Game Chart, the 25 -Game Chart and the 10 -Game Chart.

We read that chart this way: In PA 6/40, Lotto \#26 had 126 hits in the 621 Game (or All Time) Hit Chart. \#26 ranks first, and it has a hit ratio of 115.9. The other charts show the more recent trends, but are read the same way. The 50-Game Chart tells us that during the past 50 games, \#19 is the hottest top-ranking number, with 16 hits, with a hit ratio of 182.9 .

Notice that \#19 was the second all-time hottest number in the first chart. When the charts contain fewer drawings, more numbers are in the same rank because more numbers have the same number of hits. For example, in the 25-Game Chart, \#19 ranks second but it appears to be down further than it actually is. Notice that nine numbers are all in the second rank because they've each had six hits. And five Lotto numbers in that chart are in the first rank, with seven hits each.

Click on a number to highlight its position in each chart (a yellow bar will appear over the rows with the selected number).

## Change Group Sizes

Right click on the chart and choose Change Group Sizes to change the number of games in the Game Groups in the last three charts. For example, if you want to change the 50 -Game group to include 310 games, then type 310 in the box next to Largest Group. You can change the game groups to contain any amount of drawings you desire.

## Option 7a. Hit Trends

To access this sub-chart, from Chart 7 click the tab at the top for 7a. - Hit Trends. This chart shows you the Hits or total hits and \% percentage of hits for each number across each of the four Hit Charts.

One benefit of using the Hit Trends Chart is to be able look at any Lotto number instantly in all four charts, and see how many hits (and percentage of hits) a number had in each of the four charts. The Net Change percentage on the far right tells you the percent change between the first and fourth charts.

The Lotto numbers are listed in the far left column from 1 to the highest number in your game. Don't forget that you can click any column to sort by hits or percentage in any of the charts instead of by number. Sort by the Net Change column to see the Lotto numbers with the highest net change on the plus side and click again to see the lowest at the top. Lotto \#26, with a net change of $-2.9 \%$ would be the most likely long shot to play. Next to consider would be numbers 24 and 27.

## Option 7b. Hit Ratios

To access this sub-chart, from Chart 7 click the tab at the top for 7b. - Hit Ratios. This chart shows you the Hits or total hits, the Ratio of hits, and the Change from the previous chart for each number across each of the four Hit Charts.

## Option 7c. Graph Side-by-Side

To access this sub-chart, from Chart 7 click the tab at the top for 7c. - Graph Side-bySide. This bar graph shows visually the hits for each of the 4 charts side by side for each number.

The lotto numbers are shown across the bottom of the chart. The Hit Ratio is listed vertically across the left side of the chart. The key at the top of the chart explains which color of bars represents the hits for which chart. The hit values are also written next to the bars.

Note: This graph is only available as a bar graph, so the other graphing options will not
change the display.

## Option 7d. Graph Comparison

To access this sub-chart, from Chart 7 click the tab at the top for 7d. - Graph Comparison. This shows bar graphs for each of the Hit Charts separately.

The far left side shows which Hit Chart is showing next to it - the top graph is for the most games. You can click the small title of the Hit Chart to sort by that chart. The bottom row shows the lotto number. If you had sorted by the Hit Chart, you can also click the game title/lotto number to resort by lotto number. The bars show the hit ratios for each number.

## MENU OPTION 8 COMPANION NUMBER CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 8 | Pick Chart (drop down) $\rightarrow$ <br> 8. Companion Number <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ 8. Companion <br> Number | 8 |

## Purpose and Overview

The Companion Number Chart shows how many times each Lotto number has hit with every other Lotto number since the beginning of the game. The more Lotto history there is, the more deeply etched and reliable the patterns. Like the Skip \& Hit and Multiple Hit Pattern Charts, the Companion Number Chart requires the most historical data to be effective. Use it to find and include numbers that hit together most often with your strongest numbers, and to exclude those that don't.

The Lotto numbers are listed across the top and bottom of the chart and also down the left side. The numbers inside the chart indicate the number of times each Lotto number has hit with every other number. Locate the number you want to play and then find the numbers it hits with
most often.
Notice that some Lotto numbers win more often with certain other numbers. For example, Lotto numbers 1 and 9 have hit together only three times in 621 games. And 1 has hit with 6, only five times. But 1 has hit with 3, seventeen times. And 1 has hit with numbers 19 and 23, eighteen times. Scroll to see that 1 has hit with 33, twenty-one times.

Once you have decided on a group of numbers that look ready for a win-but you need to eliminate a few-the Companion Number Chart can help make that decision for you. It is better to play the numbers that hit together more often and to eliminate the numbers that rarely hit together, unless, of course, they have other strong patterns going for them.

## Option 8a. Individual Graph

To access this sub-chart, from Chart 8 click the tab at the top for 8a. - Individual Graph. Here you find a bar graph for each individual Lotto number. The Lotto number for the currently displaying graph is at the bottom and top of the chart. The numbers up the left side of the chart show the number of hits. Use the scroll wheel or scroll bar or up and down arrow keys to switch through the other lotto numbers.

## Option 8b. Best Pairs

To access this sub-chart, from Chart 8 click the tab at the top for $\mathbf{8 b}$. - Best Pairs. This shows the best pairs, or the numbers that Hit Most With and Hit Least With each lotto number. The sub-script number to the bottom right of the bold number is the number of times that lotto number hit with the number in that row. For example, in PA 6/40, \#1 hit with \#33 a total of 21 times.

If multiple numbers have a tied score of hitting with a lotto number, they will show in parenthesis and the number to the bottom right applies to each of them. For example, in PA 6/40, \#1 hit with \#19 a total of 18 times, with \#23 a total of 18 times, and with \#30 a total of 18 times.

If too many numbers have a tied score, the parenthesis may show a total of how many numbers, like ( 23 nrs ) instead of listing each one.

Note that pairs that have never hit together do not appear in the Hit Least With column.
Scroll to Lotto \#38. Notice that \#38 has hit with \#26 thirty times, but 38 has hit with 1,3, and 6 only nine times.

You can click on a row to switch to the 8a. Individual Graph for that lotto number.

## MENU OPTION 9 COMPANION PAIRS CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart 9 | Pick Chart (drop down) $\rightarrow$ <br> 9. Companion Pairs | 9 |
| or |  |  |
| Charts (from main drop down menu) $\rightarrow$ |  |  |
| Long Term Charts $\rightarrow$ 9. Companion |  |  |
| Pairs, Triads, Etc. |  |  |$\quad$| ( |
| :--- |

## Purpose and Overview

The Companion Pairs Chart shows which numbers have been drawn together most often. Not only are Pairs shown, but the sub charts also show Triads, Quads, Quints and Sixes if they occurred. The Hits With feature shows you all the drawings in which a group of numbers appeared.

In PA 6/40, one Companion Pair, 26 and 38, has hit thirty times - the sum of these numbers is 64. Five Companion Pairs have come up 28 times, and they are listed in ascending order by the lowest number in the pair.

## Hits With Feature

Click on any group of numbers from Chart 9 to bring up the Hits With feature for that companion pair or group. Hits With shows the list of dates and drawings with the numbers from the selected pair or group highlighted in bold. You can also see the Sum, and the Skipped column shows you how many games were skipped in between the drawings that contained this pair.

In PA 6/40, click on 7-19 in Chart 9 to see which drawings included both these numbers. \#7 and \#19 appeared together in 16 of the 621 drawings.

## Hits With Graph

To access this sub feature, from Hits-With, click the tab at the top for 2. - Hits With Graph. This bar graph shows visually how many times each other number hit with the currently selected group of numbers.

In PA 6/40, for the pair of 26-38, we can see that each of those numbers shows 30 times in the graph, because they hit together 30 times. The number that hit with that pair most often was \#21, which hit 9 times in combinations that contained both 26 and 38 .

## Skipped Graph

To access this sub feature, from Hits-With, click the tab at the top for 3. - Skipped Graph. This sub feature shows the number of Drawings Skipped on the left side and the bottom row shows the draw number of each drawing that contained the pair or group. The number above each bar is how many drawings were skipped between each hit.

In PA 6/40, for the pair 26-38, there were 26 drawings that did not contain this pair, then a hit, then 2 skipped drawings, a hit, 10 skipped drawings, etc.

## Option 9a. Best Triads

To access this sub-chart, from Chart 9 click the tab at the top for A. - Triads. This subchart shows the groups of 3 numbers that hit together most often.

In PA 6/40, the Companion Triad 3-30-37 has been drawn ten times. Six Companion Triads have been drawn seven times.

## Option 9b. Best Quads

To access this sub-chart, from Chart 9 click the tab at the top for B. - Quads. This subchart shows the groups of 4 numbers that hit together most often.

In PA 6/40, four Companion Quads have been drawn four times each.

## Option 9c. Best Quints

To access this sub-chart, from Chart 9 click the tab at the top for $C_{\text {. }}$ - Quints. This subchart shows the groups of 5 numbers that hit together most often.

In PA 6/40, one Companion Quint has been drawn three times: 12-16-22-31-40.

## Option 9d. Best 6's

To access this sub-chart, from Chart 9 click the tab at the top for $\boldsymbol{D}$. - $\mathbf{6}$ 's. This sub-chart shows the groups of 6 numbers that hit together most often.

In PA 6/40, two sets of 7 numbers (including the bonus) have produced a Companion SIX twice! But, if you turn off the bonus number (with the $\boldsymbol{B}$ - icon), you'll see that no six out of six jackpot winning combination has ever repeated in this game.

## Option 9e. Best 7's

To access this sub-chart, from Chart 9 click the tab at the top for $\boldsymbol{E}$ - $\mathbf{7}$ 's. This sub-chart will list the groups of 7 numbers that came up together most often. This option will only show in a pick-6 game if there is a bonus, like in our demo PA 6/40 game. In PA 6/40, there were no groups of 7 numbers that came up more than once.

If the game has more than 7 numbers, more options will appear in the tabs to see groups of 8 or more numbers. These will often be blank, since it is rare to have large groups of numbers repeat.

## MENU OPTION A NEIGHBORING PAIRS CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart A | Pick Chart (drop down) $\rightarrow$ <br> A. Neighboring Pairs <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ A. <br> Neighboring Pairs, Triads, etc. | A |

## Purpose and Overview

The Neighboring Pairs Chart helps you find neighboring numbers that hit together
most often. This chart is very similar to the Companion Pairs Chart and works the same way, except it focuses on only pairs of consecutive, or adjacent numbers (Example: 1-2 or 16-17 or 30-31). The chart is more useful in games that have bonus numbers or smaller number fields, and also more useful in pick-6 games than in pick-5 games.

In the PA $6 / 40$ game, only 26.4 percent of the drawings had NO Neighboring Pairs, which means that $73.4 \%$ of the drawings DID have one or more. So, you have would have probability working against you if you didn't include Neighboring Pairs in your number picks.

Notice that the hottest Neighboring Pair is 14-15. It has been drawn 25 times. Next hottest pair is 23-24, with 23 hits to its credit. The hottest Neighboring Triad, 14-15-16, has been drawn six times. Neighboring Quads are rare, averaging about one for every 100 drawings. A Neighboring Quint (five consecutive numbers) rarely occurs, although a Quint was drawn once in the 621 game history. Six consecutive numbers, such as 1-2-3-4-5-6, have never been drawn in any pick-6 Lotto game. You will tip the odds in your favor by playing only two consecutive numbers-more, of course, if you wheel the numbers.

## Hits With Feature

Click on any group of numbers from Chart A to bring up the Hits With feature for that neighboring pair or group. This is the same handy feature you saw in the Companion Pairs Chart, which lets you quickly locate numbers that hit with your selected numbers. Hits With shows the list of dates and drawings with the numbers from the selected pair or group highlighted in bold. You can also see the Sum, and the Skipped column shows you how many games were skipped in between the drawings that contained this pair.

In PA 6/40, click on 14-15 in Chart A to see which drawings included both these numbers. \#14 and \#15 appeared together in 25 of the 621 drawings. It first occurred in the $4^{\text {th }}$ drawing (so it skipped 3 drawings first), on May $7^{\text {th }}, 1982$.

## Hit With Graph

To access this sub feature, from Hits-With, click the tab at the top for 2. - Hits With Graph. This bar graph shows visually how many times each other number hit with the currently selected group of numbers.

## Skipped Graph

To access this sub feature, from Hits-With, click the tab at the top for 3. - Skipped Graph. This sub feature shows the Number of Times on the left side and the bottom row shows the lotto number. The number above each bar is how tunes each number hit with the selected neighboring pair or group.

In PA 6/40, for the pair 14-15 there were 3 drawings that did not contain this pair, then a hit, then 92 skipped drawings, a hit, 134 skipped drawings, etc.

## Option A1. Neighboring Triads

To access this sub-chart, from Chart $\mathbf{A}$ click the tab at the top for 1. - Triads. This subchart shows the groups of 3 consecutive numbers that hit together most often.

In PA 6/40, the Neighboring Triad 14-15-16 has been drawn six times. The following six Neighboring Triads have been drawn four times each.

## Option A2. Neighboring Quads

To access this sub-chart, from Chart A click the tab at the top for 2. - Quads. This subchart shows the groups of 4 consecutive numbers that hit together most often.

In PA 6/40, only one Neighboring Quad hit more than one time: 28-29-30-31 hit together in 2 drawings. There were 4 other groups of 4 consecutive numbers that each hit one time.

## Option A3. Neighboring Quints

To access this sub-chart, from Chart $\mathbf{A}$ click the tab at the top for 3. - Quints. This subchart shows the groups of 5 consecutive numbers that hit together most often.

In PA 6/40, only one Companion Quint was ever drawn.

## Option A4. Neighboring 6's

To access this sub-chart, from Chart A click the tab at the top for 4. - 6's. This sub-chart shows the groups of 6 consecutive numbers that hit together most often.

In PA 6/40, no drawing contained 6 consecutive numbers, so this chart is blank.

## Option A5. Best 7's

To access this sub-chart, from Chart A click the tab at the top for 5: - 7's. This sub-chart will list the groups of 7 consecutive numbers that came up together most often.

If the game has more than 7 numbers, more options will appear in the tabs to see groups of 8 or more numbers. These will often be blank, since it is rare to have large neighboring groups of numbers repeat.

## MENU OPTION B <br> GAMES OUT VIEW OF HISTORY

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart B | Pick Chart (drop down) $\rightarrow$ ( <br> B. Games Out View of History <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Short Term Charts $\rightarrow$ B. Games <br> Out View of History | B |

## Purpose and Overview

Games Out View of History is the second most important chart in the ADVANTAGE GOLD program. This chart has two purposes:

1. Helps you decide how many cold, lukewarm or hot numbers to choose
2. Shows you which "skip" is due

You will be rewarded with many winning tickets if you understand both functions of this chart.

This chart is a way of seeing how many games out each number was when it hit. In other words, it shows how many drawings each number skipped since it last hit. The intent is to see when too many numbers are repeating, so you can eliminate or ignore all the numbers from the most recent drawing and know when to play the numbers from the last drawing most heavily.

Some people play only numbers that have been out the longest, mistakenly thinking that such numbers are "due" to hit. But, as you will quickly learn when you look at the Games Out View of History Chart, this is clearly not the case.

The Games Out value of each number when it hit in a drawing is shown as a blue superscript number to the right of the lotto number in the Drawing column. The $L-1$ column shows how many numbers repeated from the previous drawing. $L-4$ and $L-8$ columns show how many numbers hit within the previous 4 or 8 games (or other number of games if L-4/L-8 value is changed). Tot column shows the total sum of the games out value in each drawing. Avg column shows the average games out of the numbers in each drawing. The bottom of the chart shows the
overall Average and Median of all drawings.
In PA 6/40, look at drawing \#621, which took place on February 15, 1988. We see that the winning numbers were 4-6-19-21-34-35 and the Bonus number was 2 . The number of games skipped for each of those numbers were 2-11-3-2-3-4 and 5 for the bonus number. Lotto \#4 skipped two games since it hit on February 5, 1988. So, the number in blue at the top right of \#04 is 2. Lotto \#6 had not hit since Game \#609, so it is 11 games out. Lotto \#19 had hit in Game \#617, so it is 3 games out; 21 is 2 games out. 34 is 3 games out; 35 is 4 games out and the bonus \#2 is 5 games out.

For game 621 , under the heading $\mathbf{L 1}$, which stands for Last 1 Game, we see a 0 . This tells us that 0 of the 7 winning numbers were repeat hits from the last game (no numbers in draw 621 had a games out of 0). Under L4 (Last 4 Games), we see that 3 numbers in drawing 621 hit within the last 4 drawings (games out of 0 to 3 ). Under $\boldsymbol{L 8}, 5$ numbers hit within the last 8 games (games out of 0 to 7).

Moving on toward the right, under the heading Tot for Total, it shows that 30 is the total sum of the Games Out for drawing 621. Add $2+11+3+2+3+4+5=30$. The 4.3 in the next column, under the heading $\boldsymbol{A v g}$ for Average, means that the average number of games since the last hit for all the winning numbers in Game \#621 is 4.3 ( 30 divided by the seven winning numbers is 4.3).

The lower the Tot and $\boldsymbol{A v g}$, the hotter the numbers that hit. Scroll to Game \#608, which has an average of 1.7. Notice that all the winning numbers had been out for three games or less, except for one number which had been out six games. When the total and average are higher, it means more cold numbers have hit because the Skip Periods are longer. Scroll to Game \#605, which has an average of 10.3 . Two of the winning numbers and the bonus number had been out for more than 10 games.

You can judge these against the totals and averages of the entire game, which are shown at the bottom of the chart. The overall Average tell us that over the past 621 Pennsylvania 6/40 drawings, 5.2 out of 7 winning numbers had not skipped more than 8 games. The Average of the Tot of games out per drawing is 32.7. And the Average number of skips for all numbers is 4.7. Of course, the averages will be different in the Lotto game you play.

TIP: One of our jackpot winners used this chart to play 5 small wheels, each using one number from the last drawing as a Power Number (a number repeated in each combination), and the other numbers in each wheel contained the other numbers in that drawing, along with additional choices.

Some of the sub-charts for Chart B will reveal important information about your lottery, so don't forget to check them out.

## Change In-last Setting

Right-click on the chart and choose Change IN-L4 or Change IN-L8 to switch these default values to show data for any number of games. You can learn a lot about your own Lotto game by studying this chart with all its variations.

Example: Change IN-L4 to a value of 5 . Now the chart shows the same information for the last five games, rather than the last 4 games. In PA 6/40, for Game \#621, it lists only 5 numbers that had a previous hit in the past 5 games, when it appears that there were six. Just keep in mind that zero counts for one, so it is a games out value of 0 to 4 you are tracking for last five games. That applies everywhere in this chart.

## Option B1. L4 Stats

To access this sub-chart, from Chart B click the tab at the top for B1 - L4 Stats. This sub-chart lists the statistics for each games out value from 0 to 5 over the past 4 drawings as well as totals and averages over previous groups of 4 drawings.

If you changed the In-L4 value (right clicking and choosing Change In-L4), the results will show for whatever group size of drawings that you specified.

- Games Out column lists the drawings skipped since last hit from 0 to 5.
- In L4, shows how many times each games out value happened in the last 4 drawings.
- In L4 Times, shows how many times the value of In L4 column happened in previous sets of 4 drawings.
- Times Low (0) shows how many times there were 0 numbers (which is the lowest value possible) with that games out value in previous 4 drawing groups. Hover over the value to see the tooltip hint that shows the percentage of the time that this happened.
- In L4 Average shows the average of all times in 4 games for each games out.
- In L4 High shows the highest times in 4 games for each games out.
- Times High shows how many times the highest times in 4 games out happened for each games out.
- Lotto Numbers at Each Games shows which lotto numbers are currently each games out.
Example of reading this chart: in PA 6/40, 4 times in the past 4 games, numbers hit that had a games out value of 0 . Numbers with a games out value of 0 , in past 4 -drawing groups had 4 hits, 119 times ( $19.3 \%$ of the time). The 4 -drawing low of 0 for 0 -games out happened 7 times. The 4 drawing average for 0 games out is 4.7. The 4 -drawing high for 4 -games out is 11 , which happened 1 time in the past. The Lotto numbers that are currently out 0 games are 2, 4, 6, 19, 21, 34 , and 35 .


## Option B2. Skips Due Bias Tracker

To access this sub-chart, from Chart B click the tab at the top for B2 - Skips Due. This sub-chart is one of the most helpful charts in the program. If you previously used ADVANTAGE PLUS, this chart is a combination of the old Skips Due Chart and the Skips Due Summary, so you can see everything on the screen at one time.

Skips Due Bias Tracker shows each games out and how many times that games out happened in six different drawing group periods. The default will show IN-L4 to IN-L9.

What you are looking for is a very high number of hits or a void in the number of hits, ie, no hits at a specific games out. The Lotto Numbers at Each Games Out column is not really related to this chart, but shown so you can easily get the numbers you want to use or avoid based on the specified games out.

You see the skips from 0 to 5 under Numbers with Games Out. In the next column, Numbers IN-L4, you see the number of times that lotto numbers with each games out value hit. In PA 6/40, numbers with 0 Games Out (numbers repeated from the previous game) occurred 2 times in the Last 4 games. The Lotto numbers that are currently out 0 games are: 02-04-06-19-21-34-35.

Sort by Numbers In-L4 to shuffle the order from lowest to highest, giving you the skip most due. In PA 6/40, a skip of 0 and a skip of 4 both happened least frequently, 2 times each in the last 4 games. A skip of 0 gives us lotto numbers $2,4,6,19,21,34,35$. A skip of 4 gives us numbers 8 and 14. Then you can compare which skip values happened least and most often when you add a few more drawings.

If you consider $\mathbf{I N}$-L9, then skips of 3 and 5 are most due, with a skip of 4 coming in second. A skip of 3 gives us Lotto numbers 10-12-15. A skip of 5 gives us Lotto numbers 09-13-38. So, we would give all of these Lotto numbers special consideration when viewing them on other charts. You can go back more than ten games, but it dilutes the purpose of this chart, except when tracking larger skips.

Keep this important rule in mind: THE SMALLER THE SKIP MOST DUE, THE MORE SIGNIFICANT IT IS. Since the smallest skips repeat most often, they are usually the ones most due. For example, if a skip of 1 and a skip of 5 occurred the same number of times, the Lotto numbers out a skip of 1 are far more likely to be drawn.

## Option B3. Analysis/Projection

To access this sub-chart, from Chart B click the tab at the top for B3 - Analysis. This sub-chart predicts how many hot numbers (out 10 games or less) to expect in the next drawing, based on what has happened in the past.

FM L4 stands for From Last 4 drawings. This shows a row for each number of numbers in a drawing from none to all of them that hit in the past 4 drawings. Drawings in a Row shows from 1d to 7d (1 drawing to 7 drawings), the Total, and \% percentage.

In PA 6/40, occurring most often was 3 numbers from the past 4 games, which occurred in a single drawing 92 times, in 2 drawings in a row 24 times, in 3 drawings in a row 8 times, in 4 drawings 3 times, and in 5 drawings once, for a total of 182 hits or $29.3 \%$ of all drawings.

The Projection tells us how many numbers in the last drawing were from the previous 4 games and a summary of how many L4 numbers followed that in past drawings.

In PA 6/40, game 621 had 3 numbers that hit within the past 4 games. That happened 182 times in the past, and the chart shows what happened in the next drawing when this happened before. In the entire history of PA 6/40's 621 games, a drawing with 3 numbers from the past 4 games has never been followed by a drawing that had no numbers that had hit within the past 4 games. The most common occurrence in drawings that followed 3 times In-L4 was 4 times in L4, which happened 56 times or $30.8 \%$ of the time.

When deciding on the final selection of numbers to play in your own Lotto game, check the projection for the next drawing with this chart. Don't forget you can change In L4 to any value. And remember, any of those charts can be made with or without the Bonus number by clicking the $\boldsymbol{B}-, \boldsymbol{B}+$, or $\boldsymbol{B} *$ buttons in the top icon bar.

If you change L4 to L10, you see that only three games in the entire history had had as few as 3 of the winning numbers that skipped 10 games or less. Only four of the winning numbers, out 10 games or less, has occurred 30 times-plus, twice it happened two games in a row-or a total of 34 , which accounts for only 5.5 percent of the drawings. Five winning numbers with a previous hit within the last 10 games occurred a total of 134 times and accounted for 21.6 percent of the drawings. Notice that 21 times it happened two games in a row; and twice it happened three games in a row; and once it happened 4 games in a row.

Six winning numbers with a previous hit within the last 10 games occurred a total of 258 times and accounted for 41.5 percent of the drawings. Notice that 34 times it happened 2 games in a row. And 11 times it happened 3 games in a row; and seven times it happened 4 games in a row; five times it happened 5 games in a row; twice it happened 6 games in a row; and once it happened 7 games in a row, and so on.

Notice that the majority of games ( 94 per cent to be exact) have 5,6 or 7 hot numbers that had had a previous hit within the past 10 games. This should prove beyond a doubt that people who insist on playing only the numbers which are the longest out, are guaranteed to be Lotto losers.

## Option B4. Games Out Report

To access this sub-chart, from Chart B click the tab at the top for B4 - Games Out. This sub-chart lists each Games Out value, how many Times each games out value occurred, what \% percentage of the time it occurred, the Cumulative percentage for that games out added to each lower games out total, and the Lotto Numbers at Games Out.

You can quickly see how many hot or cold numbers to include in your chosen group. Of the 4,340 numbers drawn in the 621 games, 833 of them (or 19.2 percent) had hit in the previous drawing. And 604 of the winning numbers had skipped only one drawing since the last win. This accounted for 13.9 percent of the winning numbers.

If you look at the Cumulative column, it shows for PA 6/40, numbers with a games out of 0 hit $19.2 \%$ of the time, numbers with a games out of 0 or 1 hit $33.1 \%$, etc. In fact, over half of the winning numbers ( $54.8 \%$ ) had a games out in the $0-3$ range. And numbers that hit after skipping five games or less accounted for more than two thirds of the drawings- 68.4 percent. Numbers that hit after skipping ten games or less accounted for 87.9 percent of all the winning numbers drawn in this game.

This means you should normally try to play approximately half of your numbers for this game, from numbers that are 0 to 3 games out. This varies for each lottery. Games with higher number fields will have lower percentages of hot numbers hitting. Most pick-5 games show 5 games out as the mid-point. Powerball and Mega Millions both show 7 games out. This chart now shows a new column, Lotto Numbers at Games Out, so you can easily make your selections.

You can also look for a bias in the games out values. Like most biases, they don't occur frequently, or they wouldn't be called biases but rather norms.

## Option B5. Games Out Cumulative Graph

To access this sub-chart, from Chart B click the tab at the top for B5 - Graph. This subchart shows visually the number of times that each games out value occurred

Each bar represents one games out value, from 0 at the left, to the highest games out value on the right. You can see that the lower games out values occur a very significant amount more often than each higher games out value.

The numbers across the bottom of the chart show both the games out value and the cumulative percentage to the right. Because of limited space, the values are staggered into 2 rows.

In PA 6/40, the first bar represents a Games Out of 0 , which occurred 833 times, or $19.2 \%$ of the time. A games out of 1 happened 604 times, and games out of 1 or less happened $33.1 \%$ of the time. A games out of 2 happened 524 times, and games out of 2 or lower happened $45.1 \%$ of the time. A games out of 3 happened 421 times, and $54.8 \%$ of all numbers drawn had a games out of $3,2,1$, or 0 .

## MENU OPTION C ADJACENT HITS CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart C | Pick Chart (drop down) $\rightarrow$ <br> C. Adjacent Numbers | C |
| or |  |  |
| Charts (from main drop down menu) $\rightarrow$ |  |  |
| Long Term Charts $\rightarrow$ C. Adjacent |  |  |
| Numbers |  |  |$\quad$| lum |
| :--- |

## Purpose and Overview

The Adjacent Hits Chart shows which of the numbers on either side of last game's winning numbers are most likely to come up as winners in the next drawing.

Adjacent Numbers are one number higher or one number lower than a winning number in the previous drawing. So, if, for example, Lotto number 3 hit, its adjacent numbers in the next game would be 2 and 4. The adjacent numbers for Lotto \#1 would be 2 and the highest number in the game. In this chart, you only need to look at the rows for the winning numbers, marked by an $\boldsymbol{x}$.

- \#\# shows the Lotto number. Numbers in bold text with a * are Smart Picks. Numbers with an $\boldsymbol{X}$ next to them are the numbers from the previous drawing.
- Games Out shows how many drawings each number has currently missed in a row.
- Adj Hits shows how many times the lotto number has hit following a drawing in which either of its adjacent numbers hit.
- All Hits shows the total hits of each number.
- \% shows the percentage of adjacent to total hits.
- Draws Since shows how many drawings have happened since the last time that lotto number hit after one of its adjacent numbers did.
- Followed Nr Below shows stats for the lower adjacent lotto number \#\#, and how many Times and \% of times it hit, and how long Since the number was a lower adjacent number.
- Followed Nr Above shows stats for the higher adjacent lotto number \#\#, and how many Times and \% of times it hit, and how long Since number was an upper adjacent number.
- Avg shows the average for each column

In PA 6/40, number 2 was one of the numbers from draw 621 (denoted with an $\boldsymbol{x}$ ). This means we can look at its adjacent numbers, 1 and 3 , for the next drawing. Number 4 was also a winning number, so \#3 is one of its adjacent numbers as well. Look at the row for \#2. In the Followed Nr Below column \#1 followed \#2 only 13 times or $15.7 \%$ of the times which last happened in the most recent drawing. In the Followed Nr Above column, \#3 followed \#2, 24 times, or $20.9 \%$ of the time. It has been 33 drawings since \#3 hit after \#2. Now look at the row for \#4. In the Followed Nr Below column, \#3 hit after \#4 less often, at 21 times or $18.3 \%$ of the time, which hasn't happened in 54 drawings. In the Followed Nr Above column, \#5 hit 23 times after \#4, or $21.7 \%$ of the time, which last happened 39 drawings ago. The average hits for all adjacent numbers was 19.4 times for the lower number and 18.8 times for the upper number. So, \#3 is a Smart Pick, since it had higher than average values both following \#2 and \#4.

Frequently Asked Question: Why are the adjacent hits for a number not the same as the sum of the times it followed the lower number and the times it followed the upper number? Explanation: In some cases a number follows both upper and lower adjacent numbers in the same drawing. In this case it is only counted once as an adjacent hit for that number. However, each adjacent number counts that drawing as a hit so the end result is that the sum of the "Followed Below" and "Followed Above" do not necessarily agree with the count of adjacent hits for the number itself.

## Option Cl. Adjacent Hits Tracker

To access this sub-chart, from Chart C click the tab at the top for C1 - Adjacent Hits Tracker. This sub-chart lists each drawing with the adjacent numbers in bold text, the total number of adjacent numbers in each drawing, and the total of adjacent numbers from the past 5 and 10 games. Hover the mouse over the $\mathbf{A d j}, \mathbf{L - 5}$, and $\boldsymbol{L - 1 0}$ headings to see percentages for each adjacent number total.

Are Adjacent Numbers worthwhile tracking? Mathematical probability tells us yes when we look at this chart and see that only $4 \%$ of drawings had no adjacent numbers. There are an $\boldsymbol{A v g}$ or average of 2.3 Adjacent Numbers each game!

## Option C2. Analysis/Projection

To access this sub-chart, from Chart $\mathbf{C}$ click the tab at the top for $\mathbf{C 2}$ Analysis/Projection. This sub-chart lists the number of adjacent numbers, how often they occurred once or multiple drawings in a row, and the projection for what happened after the same adjacent value as the most recent drawing had.

In PA $6 / 40$, no adjacent numbers happened for 25 single drawings. There were never more than 1 drawing in a row that had no adjacent numbers. There was a total of 25 drawings that had no adjacent drawings, or $4 \%$ of all drawings. 1 Adjacent number happened for 75 single drawings, 17 times for 2 drawings in a row, and 2 times for 3 drawings in a row. A total of 115 drawings had 1 adjacent hit, or $18.5 \%$ of all drawings. No drawings had all 6 plus the bonus as adjacent numbers.

The Projection tells us how many numbers in the last drawing were adjacent numbers and a summary of how many adjacent numbers followed drawings when that happened the past.

In PA 6/40, game \#621 had four Adjacent Numbers, which happened 57 times in the past and was followed most often by a game with two Adjacent Numbers, which happened 21 times or $37 . \%$ of the time. So, you should consider playing 2 adjacent numbers in the next drawing, or 2 numbers out of the group of $1,3,5,6,18,20,22,33,35$, and 36 .

## Option C3. Adjacent Hits Graph

To access this sub-chart, from Chart C click the tab at the top for C3 - Adjacent Hits Graph. This sub-chart shows visually a bar chart for each lotto number that represents how many times it hit as an adjacent number.

Each bar is split into 2 colors to represent when it hit as an upper or lower adjacent number. The numbers on top of the bar show the adjacent above hits versus the adjacent below.

In PA 6/40, \#1 was followed 8 times by a lower adjacent number (\#40), and 13 times by an upper adjacent number (\#2), for a total of 21 times hitting as an adjacent number.

## MENU OPTION D TRAILING NUMBERS

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart D | Pick Chart (drop down) $\rightarrow$ <br> D. Trailing Numbers <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Long Term Charts $\rightarrow$ D. Trailing <br> Numbers | D |

## Purpose and Overview

Trailing Numbers Chart is the chart to use if you want to find out which numbers followed (trailed) last week's winners the most often throughout the entire history of your game. Trailing Numbers helps us find numbers that, in the past, had hit most often immediately after the numbers that just hit.

Across the top of the chart you see the numbers that won in the last drawing. In PA 6/40, the last drawing was 4-6-19-21-34-35 and bonus 2 . The \#\# Lotto numbers are in the column on the far left. The numbers in the other columns show the number of times each of the Lotto numbers has come up as a winner in a drawing immediately after the number at the top was drawn as a winner.

Click to sort by the column of the first winning number so that you see the numbers that have won most often in the drawing immediately following all the drawings in which that number was a winner.

In PA 6/40, \#4 was a winner, and after sorting, you see that Lotto numbers 7-10-17-38 (down the left side) have come up in 26 drawings immediately after number 4 had been drawn as a winner. Sort by the \#6 column to see that \#24 most often follows \#6 in the next drawing, and has done so 25 times in the past. Numbers 10, 26 and 36 have followed \#19 a total of 28 times. \#26 has followed \#21, 30 times and 10 has followed 27 times. Sort by Total to get a reading of which numbers most often followed all the numbers in the last game. Notice that Lotto \#26 has done so most often-160 times. And \#10 follows in second place, for a total of 157 times.

## Sensitivity Setting

The Sensitivity setting at the bottom of the chart has a default value of 1 . This is the number of test numbers that must be in a drawing before the drawing's numbers are counted as followers. You can change this value to be as high as one less than all the numbers in a drawing.

In PA 6/40, with the bonus included, sensitivity can be set between 1 and 6 . By changing the sensitivity to 2 , you are requiring the chart to produce Lotto numbers following previous games that had two or more numbers in common with Game \#621. We see that \#10 followed most often, a total of 107 times. Now change Sensitivity to 3 . We see that $\# 4$ followed most often, 41 times. Change the sensitivity to 4 . The \#4 sill appears at the top of the chart with a total of 8 occurrences.

## Skips Draws Setting

Skips Draws at the bottom of the chart is the number of drawings to skip after a drawing is found containing test drawing numbers. Skips Draws has a default value of 0 which means it counts the number in the drawing right after the found drawing. You can adjust this up to 5 .

In PA 6/40, change the Skip Draws to 2. Now, rather than looking at numbers trailing the last drawing, we are looking at numbers trailing the Game \#620, which is the drawing before last. Change the Skip Level key to 3, and you will see the numbers that most often followed the winning numbers from Game \#619.

## Smart Picks

The object of this chart is to play the numbers that most often follow one or more of last game's numbers. The Smart Picks, starred with the asterisk, are taken from the top half of the chart - or slightly less than half, depending on where all the numbers in the same rank end. You can use some or all of the starred numbers under the Total column, or you can use numbers that most often follow one or more of the numbers.

## MENU OPTION E TEN GAME GROUP COUNT

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart E | Pick Chart (drop down) $\rightarrow$ <br> E. Ten Game Group Count | $E$ |

## Purpose and Overview

Ten Game Group Count can help you recognize which number groups are most due and should be most heavily played. It also can eliminate ten or more Lotto numbers from your field of play and turn a 49-number Lotto into a 39 -number game, or a 39 -number game into a 29 number game, etc.

In addition to the first chart which shows all the history of the game which is always present, there are 3 other charts showing groups of games. The default groups of 50, 25 and 10 games may be changed to any value. For example, you might want to make groups of 20, 10 and 5 games. Click the heading to change the number of games shown in the other 3 charts.

This chart shows the following information for each of the 4 time periods:

- Number Groups are the range of numbers in each group that are shown in the first column
- Hits shows how many times numbers from the number groups came up as winners in
drawings during that time period
- Bias shows the number of hits above or below the average number of hits
- \% Percentage shows the ratio of actual hits to expected hits for each number group ( $100 \%$ is exactly normal)
- Avg shown across the bottom row is the average number of Hits of all number groups in each of the time periods
In PA 6/40, numbers in the Number Group from 1 to 10 had 1054 Hits since the beginning of time, which is 33 less than the average, so the Bias is -33. This group had $97 \%$ of its expected hits, or 3\% less than normal. Number Group 11-20 had 1105 Hits, giving that group a Bias of +18 , and a $\%$ of 101.7. Moving to the right we have the 50-Game Bias. The Avg number of Hits during the past 50 games was 87.5 . During the 50 -game period Number Group 01-10 had 83 Hits, a -4 Bias below average, and a \% of 94.5 .

Notice that during the past ten games, the teens have been exceptionally active, with the highest Bias of +4 and the 20s have had the poorest showing, with a -6 Bias. Unlike individual Lotto numbers, number groups can more or less even out eventually.

The best bets are number groups that have been very cold, which are just starting to indicate that they are becoming more active. Number groups with percentages that are too high-way out of line compared to the percentages of the other groups-could be omitted from your play. Of course, if a number looks really great on other charts, don't omit it. Long shot numbers can be chosen from strong looking Number Groups. You might want to enter as Your Picks on the Scoreboard, all the numbers in a strong Number Group.

## Customize the Number Groups

At the top of this chart, next to the icon menu, is a Group Size setting which you can change to refine your picks. It will first be set to the default group size that is most even for your lottery. Divide the number field into smaller (and more equally divisible) groups. A 5/39 game would have only 13 and 3 as groups. You can adjust this value up or down.

In the PA $6 / 40$ game we could divide evenly by 8 or by 5 or even by 4 . We might want to examine all four ways. For now, divide the 40 numbers into groups of 5 by changing the Group Size to 5 . Now you can see that number groups 11 to 15 and 26 to 30 are most due.

Alternatively, you can click on the Group Size heading and choose other options from the drop down menu which will list the common group options for your game or choose Use Custom Group to specify any groups you want, which could be of different sizes.

Custom Groups is an advanced feature of ADVANTAGE GOLD. It makes it easy to define
and select a custom number groups. These custom groups apply only to a single lottery. The fact this option exists does not mean you must or should use it but you certainly may if you want your own groups and you can always switch between your group and any of the others in the list.

Once you make a custom group for a lottery, it will show in the grid here whenever you click Use Custom Group.

If you change the number of groups, this window will re-compute the groups to divide the numbers in your lottery evenly into that many groups. Only the last group could contain a different size when the groups are computed.

You can then adjust any of the individual groups as desired.

## Limitations with Custom Groups:

- The number of groups is limited to between 2 and half the numbers in your lottery.
- The first group always starts with the number 01.
- The last group always ends with the highest number in use and can't be changed.
- Groups can't have less than one number in them.
- Groups can't overlap.


## Option El. Group Analysis

To access this sub-chart, from Chart E click the tab at the top for E1 - Group Analysis. This sub-chart shows an analysis of past groups of 10 , 25 , or 50 drawings for each number group. Click the heading of Analysis for Draw Groups to switch the selected drawing group size between 10, 25, and 50 drawings. Click again to go to the next drawing group size.

This sub-chart shows the following information:

- Number Groups shows
- Low Bias shows the lowest Bias for each number group over every 10-draw group (or whichever selected drawing group size)
- High Bias shows the highest Bias for each number group over every 10-draw group (or whichever selected drawing group size)
- Cur Bias shows the current Bias for each number group in the most recent 10-draw group (or other selected drawing group size)
- Cur Times shows how many times the Current Bias happened within 10-draw groups (or other selected drawing group size)
- Used After shows how many times the Current Bias repeated in the next drawing in past 10-draw groups (or other selected drawing group size)
- Cur Bias was Followed by shows how many numbers in each number group
followed the now Current Bias in past 10-draw groups (or other selected drawing group size)

In PA 6/40, the Lowest Bias for numbers between 1 and 10 in past 10 -draw groups was -12 . The Highest Bias for numbers between 1 and 10 in past 10 -draw groups was +8 . In the most recent 10 drawings, the Current Bias for numbers between 1 and 10 was 0.77 times in past $10-$ draw groups, numbers between 1 and 10 had a bias of 0.70 times in past 10-draw groups, numbers between 1 and 10 repeated a bias of 0 . No numbers between 1 and 10 followed a Bias of 0 in past 10 -draw groups a total of 6 times. 22 times 1 number from 1 to 10 followed a Bias of 0 in past 10-draw groups. 5 or more numbers between 1 and 10 have never followed a Bias of 0 in past 10 -draw groups.

## Option E2. Bias History

To access this sub-chart, from Chart E click the tab at the top for E2 - Bias History. This sub-chart shows how many times each bias happened in each of the number groups. Click the heading of Draw Bias History to switch between 10, 25, and 50 drawings. Click again to go to the next drawing size.

This chart lists all of the Bias values that have happened in past 10-draw groups (or other selected draw-group size). They are shown from lowest to highest in the first column. The following columns under each Number Group shows how many times the number group had each Bias in past 10-draw groups.

In PA $6 / 40$, the Number Group 1-10 had a Bias of -12 a total of 2 times in past 10 -draw groups. 11-20 and 31-40 never had a bias of -12. Group 21-30 had a bias of -12 one time in past 10-draw groups.

## Option E3. Number Group Tracker

To access this sub-chart, from Chart E click the tab at the top for E3 - Tracker. This subchart shows each drawing, the lotto numbers drawn, and the number of winning numbers that came from each group. A glance at this chart will tell you which number groups had the heaviest and lightest activity.

If you click on a group, the numbers in that group will appear in bold, both under that column, and in the Numbers Drawn column.

In PA 6/40, Game \#621 with winning numbers 04-06-19-21-34-35 and bonus 02 , with a group size of 10, there were 3 single digits (group 1-10), 1 teen (group 11-20), 1 in the 20's (group 2130 ) and 2 in the 31-40 group.

## Option E4. Number Group Analysis

To access this sub-chart, from Chart E click the tab at the top for E4 - Analysis. This sub-chart shows how many numbers in a group hit in single and sequential multiple drawings, the totals, average skip, and current and longest span of drawings that did NOT include $0,1,2$, etc numbers.

Click the heading of Number Group to switch to the next group. Continue clicking the heading to go to go to more groups or back to the first group.

In PA 6/40, no numbers from 1-10 hit in a single drawing that was followed by a drawing with at least one number from that group, 61 times. 83 times, 1 number from 1-10 hit in a single drawing. 4 times no numbers from $1-10$ hit in 2 drawings in a row. The most often occurrence was 2 numbers from group 1-10, which happened a total of 219 times.

## MENU OPTION F SUM TRACKING CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart F | Pick Chart (drop down) $\rightarrow$ <br> F. Sum Tracking <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Short Term Charts $\rightarrow$ F. Sum <br> Tracking | F |

## Purpose and Overview

The Sum Tracking Chart helps you determine whether the sum of the all the winning numbers in the next game will be higher than average or lower than average. A higher than average predicted sum would mean more higher numbers would be drawn. A lower than average predicted sum would mean more lower numbers would be drawn. The Most Probable Range of Sums for the pick-4, pick-5, pick-6, and pick-7 Lotto games we track can be found here. You can also find the approximate range by viewing sub-chart F1-Range Bias and looking at the middle 2 Sum Ranges. Find the range of sums for the Lotto game you play, and try to have at least 70
percent of your combinations fall within that range.
Add up all of the winning numbers in a Lotto game and you get a sum. Add up the winning numbers for several of the drawings and you will find that most of the winning combinations tend to fall within the same range of sums. After carefully researching all the Lotto games currently in existence, we discovered that more than 70 percent of the past sets of winning numbers are produced by only 27 or 28 percent of the possible sums. Balanced Games are four, five, six, or seven-number combinations that fall within the Most Probable Range of sums.

For example, in the PA $6 / 40$ Lotto game, there are $3,838,380$ possible combinations of six numbers. Of those, $2,731,422$ combinations have sums ranging from 95 to 151 . This means that 27.8 percent of the sums in a $6 / 40$ Lotto game account for 71.16 percent of the winning combinations. So, when you play a $6 / 40$ game, you have probability in your favor if the sum of each set of six numbers you play adds up to somewhere between 95 and 151. Less than 30 percent of the winning combinations fall outside this range.

Every number field has a different range. The 71 percent range for a $6 / 49$ game is 115 to 185 , with 150 being the Midpoint Number. (Sum theory and the Balanced Game is covered in depth in Chapters Five and Six in LOTTO HOW TO WHEEL A FORTUNE by Gail Howard)

On the bottom of the Sum Tracking Chart is the drawing number. On the left is the sum, and the bar graph will represent the sum of the winning numbers for each drawing. Bonus numbers are automatically excluded from this chart because they don't apply. Since 123 is the Midpoint Number, the sums above it spread to the right; the sums below the average sum spread to the left. You can scroll to the left (bottom scroll bar) to see past drawings, and you can get a rough idea of how the patterns are running, and can try to project which side will come in next.

## Option Fl. Range Bias

To access this sub-chart, from Chart F click the tab at the top for F1 - Range Bias. This sub-chart considers all the sums that are possible in the game, in this case, from 21 to 225 . It then divides the sums into four groups comprised of the lowest 15 percent and the highest 15 percent, leaving approximately 70 percent which is divided at the central sum of the game. The breakdown into ranges are not exact because the actual drawing results don't fit the theoretical pattern exactly. The more drawings in the game, the closer the sums will match the theoretical distribution of sums.

This chart has 4 time period sections similar to previous Charts. You can see the data for the entire history of the game, as well as the past 50,25 , and 10 drawings. The chart tells you for each Sum Range, how many Hits, the \% of drawings that it hit, and the Bias.

## Option F2. Sum Frequency

To access this sub-chart, from Chart F click the tab at the top for F2 - Sum Frequency. This sub-chart is a bar graph which displays all the sums that have occurred in the game and how
many times each sum happened. The sums are at the bottom of the chart. The column of numbers on the left indicate the frequency or number of times a particular sum has been drawn. With sufficient historical data, this chart takes the form of a bell-shaped curve, with the sums at the center being drawn most often.

In the upper right hand corner, we see that the Lowest Sum drawn in PA 6/40 game was 54, and the highest sum was 206. The average sum of all the drawings was 123.9. The median or center sum is shown in yellow, and it was 123 in this game. The blue bars fall within the Most Probable Range of Sums and the red bars are sums that are outside the Most Probable Range of Sums.

## Option F3. Sum Listing

To access this sub-chart, from Chart F click the tab at the top for F3 - Sum Listing. This chart shows how often each sum has been drawn in the Lotto game you are viewing.

In the PA $6 / 40$ game, the lowest sum, 54 , came up twice, or $0.32 \%$ of the time. There were no drawings with sums of 55 to 65 . Scroll down to view all the sums. This chart is for reference purposes only. It's an interesting learning tool but not one you'll use every time you play.

## MENU OPTION G LAST DIGIT ANALYSIS

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart G | Pick Chart (drop down) $\rightarrow$ <br> G. Last Digit Analysis <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Short Term Charts $\rightarrow$ G. Last Digit <br> Analysis | $G$ |

## Purpose and Overview

The Last Digit Analysis shows the hottest and coldest ending numbers. Last Digit(s) most due would be included or excluded according to their strength in other charts (as we explain later in the Smart Luck Secrets of Winning section). This chart works just as well for new Lotto
games with very little history.
This chart shows the following information:

- Last Digit shows each last digit from 0 to 9 so you can see the stats across the row for each digit. The subscripts to the bottom left of each digit are digits that were present in the last drawing - an x for zero times or a number for how many times the last digit appeared in the most recent drawing.
- In Last 5 shows how many times each last digit appeared in the past 5 games.
- Last 5 shows the bias of each digit in the most recent 5 drawings.
- Total Draws shows the total number of drawings in the current range that contained one or more winning numbers with that last digit.
- \% of Normal shows shows the percentage of normal for each last digit. $100 \%$ means the digit showed no bias.
- Total Bias shows how many drawings were above or below the normal count for that last digit.
- Times in Same Drawing shows how many drawings contained each last digit 0,1 , 2,3 , or 4 times in the same drawing.

To find the Last Digit(s) most due, look for the Last Digit which had the fewest hits during the previous 5 games (In Last 5). Notice that in the PA 6/40 game, numbers ending in 5 had only two hits in the past 5 games and under the Last 5 column you can see that the last digit of 5 had a bias of -2 . So, you might favor numbers ending in 5 .

For the most accurate reading of the Last Digit Analysis, click the In Last 5 column to change L5 to L6, then L7, L8, L9, L10 and note which Last Digits keep showing a low bias. We see that 5 is the Last Digit most likely to be drawn. So we would give special consideration to Lotto numbers 5-15-25-35 when viewing other charts. We would keep only one or two of those that have the best patterns on other charts. We see that Last Digits 6 and 7 are next most due, followed by Last Digit 0 . Keep in mind that when you go too far back, you lose the whole point of this chart-which is tracking the biases of short term trends. Ten games is far enough.

Many people like to play lucky 3s, or a repeat of some other so-called lucky digit. So they mark a Lotto ticket with numbers such as 3-13-23-33-43-53. What are their chances of winning a jackpot when using many numbers with same last digits? They are guaranteed to seldom win even a four-number prize!

In PA 6/40 game, we see that out of 621 drawings, not one had four last digits the samemuch less five or six. Drawings with even three last digit the same are rare. They appeared in only 2.2 percent of the drawings with a Bonus number. This chart should convince you that you shouldn't go out of your way to play multiple numbers with the same last digit. However, if two or more numbers with the same last digit are strong on other charts, there's no need to eliminate them from your wheel.

A combination with two or three same last digits is less likely to win a jackpot, but it doesn't
affect your chance of winning a second or third prize. And, if those same last digit numbers are strong on other charts, one or the other may hit - or possibly both!

Of course, when you wheel your numbers, you'll unavoidably include numbers with same last digits because you are playing with many numbers. If numbers with same last digit are clustered together in your wheel, use the Optimizing feature to spread your numbers into different combinations.

## Option G1. Last Digit Tracker

To access this sub-chart, from Chart G click the tab at the top for G1 - Last Digit Tracker. This chart shows each drawing, the Numbers Drawn and how many numbers contained each Ending Digit. Click any Ending Digit to see all the winning numbers with that last digit in bold text.

In PA 6/40, draw \#621 contained one number ending in 1, 2, 5, 6, and 9, and 2 numbers ending in 4.

## MENU OPTION H LOW/HIGH BIAS TRACKER

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart H | Pick Chart (drop down) $\rightarrow$ <br> H. Low/High Bias Tracker <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Short Term Charts $\rightarrow$ H. Low/High <br> Bias Tracker | H |

## Purpose and Overview

The Low/High Bias Tracker helps spot opportunities to cash in on a bias indicated by too much activity in either the lower half or the upper half of the number field. The Lotto game is divided in half. In PA 6/40, the LOW half includes the numbers 1 to 20; the HIGH half includes the numbers 21 to 40 . When out-of-balance conditions occur, expect a swing in the opposite direction. Generally you should have a more or less even mix of high and low numbers unless
you see a bias.
The Low/High Bias Tracker chart shows the following information:

- Draw is the game number of each drawing (record number).
- Date is the drawing date that the winning numbers were selected.
- Numbers Drawn are the winning numbers. Low numbers are shown in blue, bold text by default. To show high numbers in bold, click the Low/High column to sort the opposite way.
- Low/High shows how many low and high numbers are in each drawing.
- In Last 10 shows the number of Low and High numbers in the drawing on that line and the previous 9 drawings.
- L-10 Bias shows the 10 -drawing bias, if any.

In PA 6/40, Game \#621, there were 4 low and 3 high numbers. As of Game \#621 there were 39 low numbers and 31 high numbers in the past 10 drawings. The $\mathbf{L - 1 0}$ Bias shows the amount and direction of any imbalance over the 10 -game range. Game \#621 has 04L, which means during the last ten games there 4 more low numbers than high numbers. When the L-10 Bias is a large number (double digits), expect the opposite to happen. Click the In Last 10 column heading to change to a different number of drawings, like the past 5 games to compare the bias for a different perspective. Expect to see more dramatic changes and higher Biases with 10 games than with 5 .

## Option H1. Low/High Summary/Projection

To access this sub-chart, from Chart H click the tab at the top for H1 - Low/High Summary/Projection.

This chart shows how many Drawings in a Row a certain mix of low and high numbers has been drawn.

The Projection on the right shows a summary of how many low and high numbers were in the most recent drawing and how many times that happened in the past, as well as what followed the previous similar drawings.

In PA 6/40, game \#621 had 4 low with 3 high numbers. This has happened 184 times in the past and was followed most often by 3 low and 4 high numbers, which happened 60 times or $32.6 \%$ of the time. The lesson to be learned from this chart is to play a well-balanced mix of high and low numbers unless otherwise indicated by the Bias Tracker.

## Option H2. 10-Draw Bias History

To access this sub-chart, from Chart H click the tab at the top for $\mathbf{H 2} \mathbf{- 1 0 - D r a w ~ B i a s ~}$

History. The bars represent how many times each bias has occurred over 10-game time periods. This bar graph is the key to understanding the averages and limits of a Bias. You can see that the biases tend to follow a bell curve, with the lower biases occurring more frequently.

The Bias History tells us that in PA 6/40, during 10-game time periods over the entire history of 621 games, there was a 12 L bias one time and an 11 H bias 2 times. The most common bias was 3 L which happened 65 times.

# MENU OPTION I ODD/EVEN BIAS TRACKER 

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart I | Pick Chart (drop down) $\rightarrow$ <br> I. Odd/Even Bias Tracker <br> or <br> Charts (from main drop down menu) $\rightarrow$ <br> Short Term Charts $\rightarrow$ I. Odd/Even <br> Bias Tracker | $I$ |

## Purpose and Overview

The features of the Odd/Even Bias Tracker are almost identical to the Low/High Bias Tracker. Only in this chart we are trying to anticipate when the Bias has swung too far, as indicated by too much activity in either the odd numbers or the even numbers. When these out- of-balance conditions occur, expect a swing to the opposite side. When using the Odd/Even Bias Tracker, the Bonus Numbers should be turned OFF.

Game format (bet size as well as size of the number field) influences the movement of the Bias. Also, the last drawing that drops off when a new drawing is added can throw off expectations. For example, when using In Last 10 as your barometer, look at the outgoing tenth game back to check the $\mathrm{O} / \mathrm{E}$ number.

The Odd/Even Bias Tracker chart shows the following information:

- Draw is the game number of each drawing (record number).
- Date is the drawing date that the winning numbers were selected.
- Numbers Drawn are the winning numbers. Odd numbers are shown in blue, bold text
by default. To show even numbers in bold, click the Odd/Even column to sort the opposite way.
- Odd/Even shows how many odd and even numbers are in each drawing.
- In Last 10 shows the number of odd and even numbers in the drawing on that line and the previous 9 drawings.
- L-10 Bias shows the 10 -drawing bias, if any.


## Option II. Odd/Even Summary/Projection

To access this sub-chart, from Chart I click the tab at the top for I1 - Odd/Even Summary/Projection.

This chart shows how many Drawings in a Row a certain mix of odd and even numbers has been drawn.

The Projection on the right shows a summary of how many odd and even numbers were in the most recent drawing and how many times that happened in the past, as well as what followed the previous similar drawings.

In PA 6/40 (with bonus turned OFF), the Odd/Even distribution of $3 / 3$ was the most common, occurring in one third of the games. Drawings with 3 odd and 3 even occurred four times in a row on five different occasions. Five drawings in a row once had four odd and two even numbers. Games with Odd/Even distributions of $3 / 3,2 / 4$ and $4 / 2$ accounted for 81.6 percent of the drawings. Notice that all odd or all even drawings never occurred twice in a row, so if you are following a drawing in which this happened, avoid playing all odd or even the next drawing.

Game \#621 had 3 Odd and 3 Even. This has happened 206 times in the past, and was followed most often by 3 Odd and 3 Even. The lesson to be learned from this chart is to play a wellbalanced mix of odd and even numbers. Once you have seen the facts and figures, it should seem pretty obvious. The exception to this rule is when the Bias Tracker shows a Double Digit bias.

## Option I2. 10-Draw Bias History

To access this sub-chart, from Chart I click the tab at the top for I2 - 10-Draw Bias History. The bars represent how many times each bias has occurred over 10-game time periods. This bar graph is the key to understanding the averages and limits of a Bias. You can see that the biases tend to follow a bell curve, with the lower biases occurring more frequently.

The Bias History tells us that in PA 6/40, during 10-game time periods over the entire history of 621 games, there was an 11E bias two times and a 9 O bias once. The most common bias was None which happened 77 times.

# MENU OPTION J CLUSTER HIT CHART 

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart J | Pick Chart (drop down) $\rightarrow$ <br> J. Cluster Hit | J |

## Purpose and Overview

The Cluster Hit Chart helps you see patterns or trends that will enable you to select numbers from the last column on the right. The other columns are the Hit Charts as they would have appeared before each of the previous drawings. This chart is easier to understand if you could imagine all of the All Time Hit Charts lined up side by side, for each drawing. It lists the Lotto numbers from the hottest (at the top of the columns) to the coldest (at the bottom) - just like the All Time Hit Chart (Menu Option 7).

Because of limited space, the Game Numbers (rather than the drawing dates) are listed at the top of the chart, so you know which drawing you are dealing with. In each column, the winning Lotto numbers that hit in that game shown in bold blue font. The reason the chart goes back many games to present, is so you can see which numbers are trending upward and which are trending downward. With the Cluster Hit Chart you are looking at the most and least frequently drawn numbers. That is, the numbers with the most hits are at the top of the chart and the numbers with the least hits are at the bottom.

The winning numbers in one column change the ranking of the numbers in the next column. The order of the numbers in a column is established before the winning numbers are drawn.

Click a number to highlight all the instances of that number. Double click a number to bring up the individual rank graph (or click the tab at the top right of the chart for J2). Don't forget to use the tooltip hints that pop up when you hover over a cell in the chart for a further explanation of what it means.

Look for areas of the chart that seem to be hitting more often than others. Frequently, two or three of the winning numbers cluster within four or five rows of the chart. When these patterns appear, choose your lotto numbers from the last column of the rank range.

Avoid choosing numbers from ranks that seldom hit. But if a number in the entire rank row has no hits on one page of the screen, it could be due for a hit. In the PA0640 example game, only one Rank (Rank \#2), had no hits on the screen. So, you would play Lotto \#19, which is seen
in the last column on the right. You should find this chart useful in helping you select long shot numbers that haven't hit for a long time. Treat this chart as an additional tool, not a primary tool, for refining your number picks.

You can move the chart back in time by using the scrollbar at the bottom.

## Option J1. Hit Rank Tracker

To access this sub-chart, from Chart J click the tab at the top for J1 - Hit Rank Tracker. This sub-chart shows the same information as the main Cluster Hit Chart, but instead of each row displaying lotto numbers in a rank, the Hit Rank Tracker shows each lotto number down the first column, with that number's rank before each drawing across the row.

In PA 6/40, \#1 had a rank of 22 before draw 621, down from its previous rank of 19 before drawings 619-620.

## Option J2. Individual Rank Graph

To access this sub-chart, from Chart J click the tab at the top for J2 - Individual Rank Graph. This graph shows the rank that a lotto number had before each drawing, so you can quickly see the patterns. The lotto number that is currently selected is shown at the top and bottom row. You can use the scroll bar or up/down keys to move to the next lotto number.

## MENU OPTION K CLUSTER SKIP CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart K | Pick Chart (drop down) $\rightarrow$ <br> K. Cluster Skip | K |

## Purpose and Overview

Cluster Skip Chart allows you to quickly identify those areas from which the winning numbers have been recently drawn, and to project which areas may have the heaviest activity in the next drawing. You can divide the Rank areas into groups to see where the winning numbers
have been "Clustering." Ranks that seldom produce hits can be eliminated from your bets. The numbers in ranks with more than an average number of hits are better choices for play, especially if that area has not hit recently.

The Cluster Skip Chart looks very similar to the Cluster Hit Chart, but instead of showing how many times each number has hit, this chart shows how recently each number has hit. Look for the most and least recently drawn numbers. Winning lotto numbers are shown in bold blue text.

The numbers that hit in each drawing appear at the top of the next column. The bottom line of the chart is a whole row of the long shot numbers, meaning those numbers which have been out the longest. As with Option J , the primary purpose of the Cluster Skip Chart is to help you to pick or eliminate numbers from the last column on the right.

Double click on a lotto number to automatically switch to Option K1. Individual Skip Graph for that number.

## Option K1. Individual Skip Graph

To access this sub-chart, from Chart K click the tab at the top for K1 - Individual Skip Graph. This area chart shows the Games Out history across all the drawings for the selected lotto number. The lotto number that is currently selected is shown at the top and bottom row. You can use the scroll bar or up/down keys to move to the next lotto number.

## MENU OPTIONL GAP DISTRIBUTION CHART

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart L | Pick Chart (drop down) $\rightarrow$ <br> L. Gap Distribution | L |

## Purpose and Overview

Gap Distribution Chart is a new chart that was not previously available before the release of ADVANTAGE GOLD. This chart is about studying the spacing between the winning numbers and in particular about the gaps (or missing numbers) between the individual numbers
in the winning combinations. It is not useful for picking numbers but more as a bet filter, like Menu Option F - Sums Distribution.

Note: Because bonus numbers are not used in bets you make, this chart will be most useful with bonus numbers turned off -- click the B- button. The same is true of Powerball type games for different reasons.

This chart shows the following information:

- Draw is the game number of each drawing (record number).
- Date is the drawing date that the winning numbers were selected.
- Day is the day of the week that the drawing took place.
- Drawing shows the winning numbers, with a small number in between each number that represents the gap.
- AVG is the average of the gaps between the numbers in the drawing.
- MAX is the maximum gap between any of the numbers in the drawing.
- TOT is the total of the gaps in the drawing. The easiest and most useful gap calculation is the gap total and it is simply the largest number less the smallest number less the number of gaps between them. In the PA640 game with the bonus excluded there are 6 numbers with 5 gaps. The largest gap would be 40-1-5 gaps $=34$.
- Column Averages is the row at the bottom which shows the average of the AVG, MAX, and TOT values for all drawings.

Like most statistics in lottery, what happens most is what has the most ways of happening, and what happens least is what has the fewest ways of happening.

In the PA $6 / 40$ game, there are $3,838,380$ combinations of 40 numbers taken 6 at a time (i.e. without the bonus number). The largest possible gap total is achieved when a combination contains both 01 and 40 and the possible ways that can happen comprise a full wheel with two power numbers which has a total of 73,815 combinations and is just $1.92 \%$ of the possible combinations. In the 621 games of the PA 6/40 game, Menu Option $\mathbf{L 3}$ shows it happened only 8 times -- certainly not something you would want to bet on.

The only way to get a gap total of zero is to have a group of strictly consecutive numbers. In the PA 6/40 game, there are only 35 ways this can happen so it should be an extremely rare event and indeed never happened in the 621 games of the PA $6 / 40$ lotto. Again you would not want to waste money on such combinations.

## Option L1. Gaps Summary

To access this sub-chart, from Chart L click the tab at the top for L1 - Summary. This shows how many times each possible gap was found in the current range of history, the
percentage that represents and the cumulative total.
The main thing you can see from this chart is that numbers that are close to each other are much more common that numbers with large gaps. Just don't use too many consecutive numbers

## Option L2. Gaps Graph

To access this sub-chart, from Chart L click the tab at the top for L2-Gaps Graph. This shows the gaps summary graphically and it is very easy to see how the shorter gaps predominate.

## Option L3. Gap Totals

To access this sub-chart, from Chart $L$ click the tab at the top for $\mathbf{L 3}$ - Totals. This chart is much more useful. It shows how many times each possible gap total has happened, the percentage that represents, and the cumulative totals from the top and from the bottom. These last two can be used to easily see what should be the low and high gap totals to avoid combinations with the rarest totals. Click on the numbers in the TIMES column to see the actual drawings that had those gap totals.

## Option L4. Gap Totals Graph

To access this sub-chart, from Chart L click the tab at the top for L4 - Totals Graph. Gap Totals Graph shows the information in Menu Option L3 graphically. The bars are for each Gap total that has occurred in the game and shows how many times that total happened. You can easily see the structure of the likely combinations. Notice how this graph is NOT symmetrical. The lower totals happen far less frequently than the higher totals. The more drawings are in the history, the closer the graph will be to what is to be expected, but, like the sums, even a few dozen combinations will show the proper shape of this and can be used to usefully rate a combination's chances of coming up.

## MENU OPTION N LOTTO ASTRO SCOPE

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart N | Pick Chart (drop down) $\rightarrow$ <br> N. Lotto Astro Scope | N |


|  | or |
| :--- | :--- | :--- |
| Charts (from main drop down menu) $\rightarrow$ |  |
| Long Term Charts $\rightarrow \mathbf{N}$. Lotto |  |
| Astro Scope |  |$\quad$.

## Purpose and Overview

The Lotto Astro Scope shows which Lotto numbers come up most often each month, with the month being divided according to the astrological sun signs. As with all the other charts in ADVANTAGE GOLD, you should bet with the trend, that is, play the numbers that hit most often during the drawing time period in which you are placing your bets.

The date above the column is the starting date of a particular time period. It ENDS with the starting date of the next column. For example, the first column is Aries: $3 / 21$ to $4 / 20$; then Taurus: $4 / 20$ to $5 / 21$; Gemini: $5 / 21$ to $6 / 21$; Cancer: $6 / 21$ to $7 / 23$; Leo: $7 / 23$ to $8 / 23$; Virgo: $8 / 23$ to $9 / 23$; Libra: $9 / 23$ to $10 / 23$; Scorpio: $10 / 23$ to $11 / 21$; Sagittarius: $11 / 21$ to $12 / 22$; Capricorn: $12 / 22$ to $1 / 20$; Pisces: $2 / 19$ to $3 / 21$. Each row show how many hits the \#\# has had during each zodiac period.

In PA 6/40, during the month of Aries Lotto \#1 has had 11 hits. But in the month of Taurus, Lotto \#1 had only 3 hits. As you look across the entire chart, you see that \#1 hits most often in the month of Aries.

Lotto \#2 has also had 11 hits in the month of Aries (March 21 to April 20), but as you look across the chart, you see that $\# 2$ has had 15 hits in the month of Scorpio (October 23 to November 21).

Click on any column heading to sort by hits for that time period. In PA $6 / 40$, when sorting by Aries, you can see that $\# 5$ has had 14 hits, which puts it at the top of the list. Scroll to the bottom to see \#11 had the fewest hits in Aries, only occurring 2 times.

Let's assume you're looking for the numbers that have come up most often during the month of Sagittarius, which is from November 21st to December 21st. Sort by the column to see that 27 is the definite choice, with 17 hits. \#27 has hit twice as often in that month as in almost any other month. At the bottom of the chart, notice that $\# 25$ has never had even one hit in the month of Sagittarius.

The AVG or average number of hits and Total number of hits for each astrological month are shown at the bottom of the chart. The average number of hits in Sagittarius is 9.1, so you would want to play only those Lotto numbers with an above average score, which in this case would be 10 hits or more.

## Option N1. Best Numbers in Zodiac Sign

To access this sub-chart, from Chart $\mathbf{N}$ click the tab at the top for $\mathbf{N 1}$ - Best Numbers in Zodiac Sign. This bar graph shows the hits for each lotto number during the selected zodiac period. Use the scroll bar or up/down arrow keys to display the graph for the next zodiac period.

In PA 6/40, with Aries selected, you can click the Number of Hits heading on the left side to sort by hits and see that \#05 had the most hits during Aries, a total of 14 times. \#11 is at the far right of the chart, with only 2 hits in Aries.

## Option N2. Best Zodiac Sign for Each Number

To access this sub-chart, from Chart $\mathbf{N}$ click the tab at the top for $\mathbf{N} 2$ - Best Zodiac Sign for Each Number. This bar graph shows the hits during each zodiac period for the selected lotto number. Use the scroll bar or up/down arrow keys to display the graph for the next lotto number.

In PA 6/40, with Lotto \#01 selected, you can click the Hits for Number heading on the left side to sort by hits and see that \#01 had the most hits during Aries, a total of 11 times. \#1 had only 3 hits in Taurus, the fewest hits for that lotto number.

## MENU OPTION O HISTORY VIEW FILTERS

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart O | Pick Chart (drop down) $\rightarrow$ <br> O. History View Filters | $\mathbf{O}$ |

## Purpose and Overview

History View Filters is not a traditional chart, but includes filters that allow you to limit the drawings that are used in the other charts. This can be helpful if you want to view only Wednesday drawings, or just the nighttime drawings in a double daily drawing game.

You can use the following filters:

- Day(s) of the Week lets you select which days of the week you would like to include from the history file to be used in the other charts.
- Day(s) of the Month lets you select which dates (1-31) you would like to include from the history file to be used in the other charts.
- Month(s) lets you select which Months you would like to include from the history file to be used in the other charts.
- Astro Period(s) lets you select which Zodiac sign time periods you would like to include from the history file to be used in the other charts.
- Specific Sums lets you select which sums of the winning numbers you would like to include from the history file to be used in the other charts.
- Sum Range lets you select which sum range you would like to include from the history file to be used in the other charts.
- Hits With lets you select which lotto numbers you want to be in all of the winning combinations that are included from the history file to be used in the other charts.
- BallSet/Rotation lets you select which ballset values or rotation numbers you would like to include from the history file to be used in the other charts. This is most often used when a game draws more than once per day and you would like to limit to only Day or Night drawings. Note: Most lotto history files do not have ballsets/rotations turned on, so this filter would not be available.
Select any filter and click the check boxes next to the values you want, and click the Apply button. Then click the Done button. When you go back to the main screen, you will only see the combinations that meet the criteria of the filter you specified. These will be the combinations that are used for all subsequent charts. When a filter is applied, you will see a smaller number of Records at the bottom left of the screen, and a $*$ after the number that represents a filter is applied. When you are finished using a filter, go back to Menu Option O and click the Clear Filters button at the bottom. See more about Option O in our blog post here.

> MENU OPTION V LOTTERY ADVANTAGE SCOREBOARD

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart V | Pick Chart (drop down) $\rightarrow$ | $\boldsymbol{V}$ |


|  | V. Lottery Advantage Scoreboard |  |
| :--- | :--- | :--- |
| or |  |  |
| Charts (from main drop down menu) $\rightarrow$ |  |  |
| V. Lottery Advantage Scoreboard |  |  |$\quad$.

## Purpose and Overview

The Lottery Advantage Scoreboard includes a tally of all of the Smart Picked numbers. You must first run the other charts before they will be added up on the Scoreboard. Menu Options 3, 4, 5, 6, 7, C, and D, are the charts which generate Smart Picks. You can run as few or as many of these as you would like to include in the Scoreboard.

The Scoreboard shows the following information:

- The lotto number displays down the first column of the chart. The Lotto numbers with the highest Score Totals are at the top of the chart.
- The Chart \# across the next 7 columns is for each of the Smart Pick charts.
- Weight shows how much weight each chart has been given. The default is 1 for each chart. You can change this for any chart you feel is more or less important than others.
- Your Picks allows you to enter a total number that you want added to a lotto number's score, for example if you had a strong feeling about a lotto number from some of the charts that do not generate Smart Picks, you could add your own total here.
- NO column shows the numbers you do not want to be included in the Scoreboard. Click the box next to a number to exclude it.
- YES column shows the numbers you want to force as picks in the Scoreboard. Click the box next to a number to force include it.
- Total Score is the total number of charts that picked each lotto number. A bold $\boldsymbol{X}$ in this column means the number was selected in the $\mathbf{N O}$ column to be excluded. A bold $\boldsymbol{F}$ in this column means the number was selected in the YES column to be forced as a pick.
- OUT is how many drawings each lotto number has currently missed.
- Rank is the Hit Ratio from Chart 3 for each lotto number. $100 \%$ is exactly normal. Lower than $100 \%$ are numbers that have hit less often and numbers above $100 \%$ are the most hitting numbers.
- Last 10 shows the activity from the last 10 drawings like Chart 4A. A dash represents a miss, an $x$ is a hit, an a is a bonus number hit.
- Total at the bottom shows the total number of picks for each chart.

Lotto numbers chosen as Smart Picks by any one chart, are marked with an "X" under that chart heading. The best Lotto numbers to play, of course, would be those with the highest score totals.

## Give Extra Weight to Favorite Charts

Your favorite charts can be given extra value by changing the default 1 for the Weight row under any chart. For example, if you like one chart more than the others you can enter a 2 as its weight so that chart will count double in the total score. Or you can change the weight to a zero and all the X's will disappear from that column.

## Give Extra Weight to Favorite Numbers

You may enter your own number choices under the Your Picks column. Enter a 1 or higher value under Your Picks next to the lotto number you want to give more weight.

## Clearing Options

To remove all picks from the Scoreboard, right-click on the chart and choose Clear Scoreboard. Once the Lottery Advantage Scoreboard is cleared, you will have to run the charts again by pressing ESC after opening each of the Options 3, 4, 5, 6, 7, C, D. This process has to be repeated whenever you update the game history. It takes less than ten seconds to do it. When necessary, a pop-up window at the bottom of the screen will tell you that you need to run the charts by doing this.

To clear all of the NO column selections, right-click on the chart and choose Clear NO Column (Excludes).

To clear all of the YES column selections, right-click on the chart and choose Clear YES Column (includes).

# MENU OPTION W SMART PICKS 

Note: Like the Scoreboard, before using Smart Picks chart, you must first run the charts that you want to choose Smart Picks from: 3, 4, 5, 6, 7, C, D are the Smart Pick charts.

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart W | Pick Chart (drop down) $\rightarrow$ <br> W. Smart Picks <br> or | W |
| Charts (from main drop down menu) $\rightarrow$ <br> W. Smart Picks |  |  |

## Purpose and Overview

Smart Picks selects the best numbers from each of seven individual number charts. Those numbers are automatically tallied on Menu Option V = Lottery Advantage Scoreboard. You simply tell the program how many Smart Picked numbers you want, by using the arrow keys next to the Number of Smart Picks box or clicking on the text box and selecting a number from the number pad that pops up.

The numbers will instantly appear below in the Your best numbers box. Numbers chosen this way are programmed to produce a relatively even mix of High/Low and Odd/Even numbers which explains why different sets of Smart Picks are given when you select the same group size a second time. (See Lottery Advantage Scoreboard for exact number of most chosen Smart Picks).

## Selection Method

There are 4 selection methods that Smart Picks chart can use to pick numbers. You can select these from the drop down menu. These options are:

1. Scoreboard - Balanced (Default option): This option will show lotto numbers by total score meaning all numbers with a total of 7 first, then 6 , then 5 , etc as they are shown in the scoreboard. Balanced means if the numbers chosen start getting out of balanced too far in one direction or the other (mostly odd, mostly even, mostly high, or mostly low), the chart will ignore some numbers in favor of others that have the same score but will balance the high/low or odd/even ratio. If you change the number you input, the last few numbers given can change, depending on how the numbers are balancing.
2. Scoreboard - Not Balanced: Same as Scoreboard Balanced in that it will show numbers by total score meaning all numbers with a total of 7 first, then 6 , then 5 , etc. The difference is that numbers will always be in order according to score and will not be adjusted for high/low or odd/even ratios.
3. Scoreboard Random Weighted: This is a random option that is still based on the
scoreboard. The numbers are put into a pot multiple times based on their position in the scoreboard (something like 50 times for the numbers at the top of the list and 1 time for the numbers with the lowest position). Then the numbers you asked for are randomly chosen from that pot but balanced like the 1 st option. The numbers at the top have a higher chance of being picked but all numbers have a chance. The numbers are also balanced like in option 1. This option will produce different numbers every time.
4. Balanced Random: The last option is completely random, any numbers could be drawn regardless of their score, but they will also be balanced like option 1 and 3. This option will produce different numbers every time.

## Past Performance of Your Smart Picks

The chart on the right, Number Group Test will show you how many winning numbers would have been in that particular group of Smart Picked numbers if you had played them every drawing since the first game.

In PA 6/40, if you select 10 Smart Pick numbers after running all 7 charts, the results would be 14-33-03-08-26-19-15-38-17-02. You can see in the test that in the past 621 drawings of the game, this set of 10 numbers would have produced a $5 / 6$ winning combination 6 times, or $1 \%$ of the time. It would not have matched all 6 numbers at all. The most common result would have been a $2 / 6$ combination, which happened $34.6 \%$ of the time in the past drawings.

## Wheel Your Smart Picks

If you have purchased a Smart Luck wheeling program like Wheel Gold or FFWG that matches the pick-size of your game, you can wheel your Smart Picks using that program. Once you have selected Smart Picks, you can open your wheeling program and create a wheel. On the Enter Your Numbers screen, there will be a Fill With button which opens a drop down menu. You can select to fill your wheel with one of the 2 A+ Smart Picks options.

Note: If you have an older wheel program like Wheel Six Plus, it will not connect to Advantage Gold. You can upgrade to the Windows version at a significant discount here.

## MENU OPTION X NUMBER GROUP TEST DRIVE

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart X | Pick Chart (drop down) $\rightarrow$ | $X$ |


|  | X. Number Group Test Drive |  |
| :--- | :--- | :--- |
| or |  |  |
| Charts (from main drop down menu) $\rightarrow$ |  |  |
| X. Number Group Test Drive |  |  |$\quad$.

## Purpose and Overview

With the Number Group Test Drive, you can test any size group of numbers in any state Lotto game, back through the entire history of the game and see how many times the group would have produced all $6,5,4,3,2,1$ or 0 wins, had you played that particular set of numbers every drawing since the first game.

You can select your numbers using the number pad (click on each lotto number you want to include) or type the numbers in the text box below. As you select numbers, the chart on the right will fill in with the test results over the past drawings in your game. You can see how many times $0,1,2$, etc numbers from your group would have matched in the past.

Press the Clear button to remove your number selections. Click the Sort button to sort in ascending order.

Let's do a sample run together. With PA $6 / 40$ still selected, enter the following numbers:
01-03-04-07-10-11-12-14-15-16-17-18-19-20-22-26-28-30-31-35-37-38-39-40.
If you had wheeled this group of 24 numbers in each of the 621 PA $6 / 40$ games, you would have had all six winning numbers plus the bonus number in the group in 17 of the games. You would have had six winning numbers in 82 of the games. In 179 games you would have had five of the winning numbers. In 188 of the games, you would have had four winning numbers. In 108 of the games, you would have had three winning numbers. And 41 Games would have produced 2 winning numbers. Five games had only one winning number. And in one game you would have had none of the winning numbers.

## Wheeling Your Group of Numbers

If you have purchased a Smart Luck wheeling program like Wheel Gold or FFWG that matches the pick-size of your game, you can wheel your number group using that program. Select your numbers and then click the Wheel button. The program will automatically have a list of the wheels you can use, with other wheels greyed out. Select one of them and continue with creating your wheel.

# MENU OPTION Y LOTTO ODDS CALCULATOR 

|  | Menu / Mouse | Keyboard Shortcut |
| :--- | :--- | :--- |
| Open Chart Y | Pick Chart (drop down) $\rightarrow$ <br> Y. Lotto Odds Calculator | $\boldsymbol{Y}$ |

## Purpose and Overview

The Lotto Odds Calculator will instantly give you the odds of winning any prize in any Lotto game in the world, with or without bonus numbers.

The following information is needed to create the odds chart:

- Bet Size is the number of numbers you mark for a single chance to win.
- Pool Size is the pool of numbers from which the winning numbers are selected.
- Draw Size is the number of winning numbers selected by the lottery. In most cases, this will be equal to the bet size, but for some game types like Keno, it may be larger.
- Bonus Numbers is the number of bonus numbers that the lottery selects from the same pool of numbers as the main draw size.
- Powerball Numbers is the number of Powerball numbers or numbers that that are drawn from a separate pool size than the main draw size.
- Powerball Pool Size is the pool of numbers from which the winning Powerball numbers are selected.

Let's look at the odds for the PA 6/40 game. Where it asks for Bet Size, type 6. For Pool Size, type 40. For Draw Size, type 6. For Bonus Numbers, type 1. For Powerball Numbers and Powerball Pool Size, type 0.

Instantly, the odds of winning with six, five, four, three, etc numbers will appear on the screen. You can see the Match prize with or without the bonus number and the Odds for each.

In PA 6/40, the odds of winning the jackpot or matching $6-\mathrm{B}$ are 1 in $3,838,380$. The odds of matching 5 numbers and the bonus number are 1 in 639,730. Matching 5 numbers without the bonus is much easier at 1 in 19,385.76.

You can get the odds of any game you want, whether it exists or not.

# SMART LUCK SECRETS OF WINNING 

Now that you've read the entire manual up to this point and (hopefully) understand how to use each chart, we'll tell you our shortcut way of choosing Lotto numbers in less than ten minutes. When you're in a hurry, this is the fastest way to zero in on the numbers that have the greatest probability of winning. ADVANTAGE GOLD has a vast assortment of tools that allow you to examine Lotto numbers in an infinite variety of ways-when time permits. And you should make a thorough study of all the charts and reports from time to time, to give yourself a good solid background. Educate your intuition and it will work for you.

ADVANTAGE GOLD has two types of charts:

1. Individual number charts produce actual number picks.
2. Group charts give a broader perspective or focus on biases.

Before you study and select your numbers from Charts \#3-4-5-6-7-C-D, it's extremely helpful to get a general overview of what is most likely to happen in the next drawing. It will influence your number selection process and help you more easily decide which numbers to include or delete.

## The Quick Fix Six Shortcut Tools

All of the following Quick Fix Six Shortcut Tools can be used effectively in both old and new Lotto games, even those with less than a dozen drawings!

1. Odd-Even Bias
2. Low-High Bias
3. Sum Chart
4. Number Group Bias
5. Last Digits Due
6. Skips Due.

You won't get a clear reading from all six every drawing, but a strong signal from even one or two of them could help you cash in winning tickets.

## Fewer Choices Mean Easier Predictability

When a mathematical "event" has only two (or few) possible outcomes, such as Heads/Tails in a coin flip bet, or Odd/Even, or High/Low, the outcome is more predictable because it tends to even out rather quickly. But Lotto numbers, which have thousands or millions of possible outcomes, will never even out.

## Benefit by Balancing the Bias

*** The opportunity we search for is a bias, that is, something which has gone on too long, or has gone too far out of line, one way or the other, from the norm. We can benefit by anticipating the opposite to occur, and ride the reverse trend until balance is restored. *** Read this significant paragraph again because it's the key to much that follows.

## TO IDENTIFY A BIAS, YOU MUST KNOW WHAT THE EXPECTED OR AVERAGE IS, TO HAVE A POINT OF COMPARISON. AVERAGES FOR ANY DATA ARE SHOWN AT THE BOTTOM OF ADVANTAGE GOLD CHARTS.

The only way you will know if something is out of line is if it's much higher or much lower than average. Also important is the number of drawings in a row the bias has occurred. Let's examine each of the five criteria, and we'll explain how to relate this information to actual number picks.

## ODD-EVEN

Are there going to be more odd numbers or more even numbers in the next drawing? Rather than using the all time Odd-Even Projections, supplement and refine that information by looking at the most recent $\mathrm{O} / \mathrm{E}$ (Odd/Even) activity on I, starting with the latest drawing, going back as few or many games as necessary, until you find that there is, or there is not, a pattern. (Go back five games or more.)

If there have been too many games heavy with odd numbers lately, look for the next game(s) to be heavy on even numbers. Or, if there have been more than an average number of drawings with even numbers, anticipate more odd numbers to be drawn in the next game(s). This is not so helpful in pick-6 games, but it's a dynamite tool for the pick- 5 games! If you don't expect $3 / 2$ or $2 / 3$ ( 3 odd and 2 even, or 2 odd and 3 even), what's left- $1 / 4,4 / 1,0 / 5,5 / 0$.

AN ODD/EVEN WHEELING TIP FOR PICK-5. If you don't expect $3 / 2$ or $2 / 3$, you might want to wheel all the odd numbers, or all the even numbers. In the typical $5 / 39$ game, there are 20 odd numbers and 19 even numbers. With Power Wheel \#53119-1.015 from WHEEL FIVE GOLD, you can wheel all 19 even numbers with a 3 out of 4 win guarantee for only $\$ 15$. (Or wheel all 20 odd numbers for $\$ 17.00$ with $\# 53120-1.017$.) You are guaranteed to win at least one third prize even if the outcome is $1 / 4$ or $4 / 1$. You win even more prizes if the outcome is $5 / 0$ or $0 / 5$.

## LOW-HIGH BIAS

Are there going to be more high numbers or more low numbers in the next drawing? High numbers are the top half of the number field of your game, and low numbers the bottom half. (For example, In a 6/40 game, numbers 1 to 20 are the low numbers and 21 to 40 are the high numbers.) Rather than accepting the all time High-Low Projections, supplement and refine that
information by looking at the most recent High-Low activity on Chart 2, starting with the most recent drawing, going back as few or many games as necessary, until you find that there is, or there is not, a pattern.

If there have been too many games with low numbers lately, look for the next game(s) to be heavy with high numbers. Or, if there have been more than an average number of drawings with high numbers, anticipate more low numbers to be drawn in the next game(s). Keep in mind, when lower numbers are drawn, the prize payout is usually less than average. If you suspect lower numbers will be drawn, you may want to buy fewer tickets.

## SUM CHART

Please refer to the previous chapter for Menu Option F = Sum Tracking Chart to understand sums and to get the most probable range of sums for your Lotto game. What you want this chart to tell you is: will the sum of the next game's winning numbers be a little higher than average, or a lot higher than average, or will it be a little lower than average, or a lot lower than average.

When you look at this chart, you can see how quickly a bias compensates by reverting to the opposite soon after. For example, you may see a few drawings in a row that have sums a little higher than average, followed by one drawing that has a sum much lower than average. To get the most benefit from this chart, view the entire chart by pressing the up arrow key. Come back to the present by pressing the down arrow key. Or print the entire chart, and analyze what has happened in the past to help you project what can be expected from certain patterns that form in the future. You'll soon get an educated "feel" for which sum ranges to expect in the next drawing. Your projection on this chart should correlate with the above High-Low Bias. A higher sum requires higher numbers.

## NUMBER GROUP BIAS

Which number group(s) can be eliminated from your field of play, and which number group(s) should be more heavily played in the next drawing? Menu Option E = Ten Game Group Count holds the answers to those questions. The Number Group Tracker shows that often there are no numbers from a group in a drawing. More often than not, at least one number group can be eliminated from your field of play.

You'll want to give extra heavy play to a Number Group when it has bottomed out (or finished its "valley" formation), and is just starting upward. On the other hand, you can eliminate a Number Group from your play if it has topped out (at a relatively historic high) and shows the first signs of trending downward.

Press the minus key to go back in time, game by game, and use past results as a learning tool to study how they affect your own Lotto game.

A number group doesn't have to be just single digits, teens, 20s, 30s, 40s, etc. It can be groups of five (1-5, 6-10, etc), or groups of seven, or any other way you want to study number group
data. By examining your Lotto game divided several ways, you can verify, narrow or refine the activity within the various groups and zero in on the most likely to win and least likely to win sections. When you have distilled the best sections, you may want to wheel all the numbers in all of your best sections.

## LAST DIGITS DUE

This valuable chart is Menu Option G - Last Digit Analysis. The Last Digits with the fewest hits are the ones most due. Click the In Last 5 column heading to change L5 to L8 or L10 when two or more Last Digits have the same number of hits. This will help you zero in on the 3 or 4 Last Digits most likely to hit.

## SKIPS DUE

Is the next drawing going to have more than its share of long shot numbers coming in, or will there be more hot numbers than usual. (Hot numbers are numbers with recent hits.) Menu Option B - Games Out View of History, is one of our favorites. When it shows a clear pattern, you can use it exclusively without the aid of any other chart.

The Average (AVG) numbers are your key to reading this chart. Notice how quickly the very high or the very low Totals reverse direction. When you see three or four drawings in a row with low Averages and Totals, you'd want to play more long shot numbers than usual in the next drawing. When you see three or four drawings in a row with high Averages and Totals, you may want to play all hot numbers the next drawing.

Study, also, the GAMES OUT values next to the lotto numbers. This shows numbers of games skipped since the last hit. If two drawings in a row have no " 0 " next to a number, which means two drawings had no repeat hits from the previous game, then you know you'll have to include in your wheel more winners from the last drawing. Or, conversely, if two or three games in a row had two or more numbers repeat from the previous drawing, you could ignore all numbers that hit in the last drawing, and not play any for a repeat hit.

Look over the GAMES OUT values for the latest five drawings and see which skip periods are missing. For example, if you don't see any "03" skips represented in the last five drawings, you may want to play all the Lotto numbers that are currently out three games. Or, if a mixture of only the very hot numbers and the very cold long shots have been drawn during the past two or three games, you might want to include in your wheel all Lotto numbers that are currently out from 06 to 14 games, for example.

## Ratio of Hot to Cold Numbers

Although precise figures vary depending on the number field, on average, one of the six winning numbers has been out for more than ten games, and the rest have had a hit within the past ten games. (The one long shot number that accompanies the other five numbers is SELDOM
the number that's been out the longest.) In most cases, your wheel should include some cold long shot numbers mixed in with your hotter picks. Long shot numbers, which are the most difficult to pick correctly, can be chosen from those that fall in the number groups of your favored five criteria. A long shot number that's in the third final stage of a Cascade is also a good one to bet.

## Also Study Other Games with the Same Number Field

With our systems you are playing the probabilities, or that which is most likely to happen based on an analysis of what has happened in the past. Get familiar with your own Lotto game's behavior. Soon you'll be able to zoom in quickly on important information, which will appear obvious to you when you're familiar with it. Study other Lotto games with similar number fields and more history. The general parameters will yield lots of valuable information.

There are pick-6 Lotto games with number fields that range from 25 to 90 numbers and pick- 5 games with number fields that range from 19 to 90 numbers. Each pick-size as well as number field game-size, has its own sets of specifics that determine the intensity of the bias, and the length and degree of the swing back to normal (average) following a bias.

It's worth investing an evening or two studying each of the five indicators throughout the entire history of your game. Each time you see an extreme from the norm, carefully document what happens in the drawings that follow. Note how long it takes for the opposite to occur and the trend to correct itself. After you've made this study, you'll instantly recognize an opportunity to cash in on a new bias as it arises because you'll know what to look for and what to expect.

## Now Select Individual Lotto Numbers

After you've analyzed the Quick Fix Six Shortcut Tools: 1) Odd-Even Bias, 2) Low-High Bias, 3) Sum Chart, 4) Number Group Bias, 5) Last-Digits Due, 6) Skips Due, you'll know which "iffy" numbers to eliminate, and which numbers or groups of numbers you should give special consideration to when studying the number specific charts, which are $\# 3,4,5,6,7,8, C, D$.

The chart with the richest patterns, and the chart we depend on most for choosing our numbers, is Menu Option 4 - Drawings Since Hit Chart. (Unfortunately, Smart Picks cannot be programmed to pick the numbers in all the ways that are possible for the human mind to pick them.) Drawings Since Hit Chart, and its abbreviated version 4A, and Menu Option 7 - Hit Charts are also the most valuable charts to use in a new game because they don't require a lot of data before they yield valuable information. You can get a brief reading with as few as ten games. Seldom do you need more than 50 drawings to use this chart with maximum benefit.

When choosing individual numbers, cross-reference one chart with another to help make final decisions. That is, unless a Lotto number is at a critical chart point and we know we'd play it anyway. When anticipating the confirmation of a trend reversal for a long shot number (meaning,
when you are expecting the second of the two hits following a long losing streak), we know that the expected second hit will occur no later than three losing games after the first hit. So, we include that Lotto number in our wheel until it has lost up to three games. (If it loses four games, stop playing it until it hits again and forms new patterns.)

However, if we're considering it as a Power Number, we consult Menu Option 6 - Skip and Hit Chart, to determine in which of the three games it is most likely to hit-after skipping one game? or two games? or three games?! Or, if a Lotto number is having a hot winning hot streak, we might consider using it as a Power Number only for the drawing most strongly indicated by the Skip and Hit Chart. (Be sure you really know how to read this chart, though.) Also cross-reference the Smart Picks from the Quick Stats, Trailing Numbers and Adjacent Numbers with this chart.

The Skip and Hit Chart can be a very helpful chart and a powerful tool for fine-tuning the precise drawing a particular number will hit. Unfortunately, this chart requires several years of drawings for reliable patterns to form. The Skip and Hit Chart and the Companion Number Chart require the most history-more than 200 games-to produce reliable patterns. Multiple Hit Pattern Chart forms usable patterns somewhat sooner.

If a Lotto number has one hit after being out for a long time (some 40 or 50 games or more), We'll include that number in our wheel, anticipating that it will attempt to make up for lost time by hitting two games in a row. However, if it has a nice low Double Hit Ratio on the Multiple Hit Pattern Chart, we may even use it as a Power Number.

A number usually gets hot following the completed third stage of a Reverse Cascade, and can be used as a Power Number particularly when strongly confirmed by the Skip and Hit Chart. Anticipating a Double or a Triple Bottom could be another Power Number possibility. However, there should be confirmation from both the Games Out View of History and Skip and Hit Chart.

The Lotto Flag Formation is a powerful pattern that seldom fails: if a Lotto number has two hits, without losing more than two drawings between the two hits; then loses five games; then hits again once; then loses five more games-at that point, play it as your Power Number. If you were to bet serious money on a Power Number wheel, that's the time to do it.

The more you work with the tools in ADVANTAGE GOLD, and the more observant you are, the more accurately you'll be able to pick the most probable numbers and number groups. There is much more we could tell you. But we don't want to overload or confuse you, either. If you find this information helpful, please drop us a line. It would help us to know which parts you don't understand, or found confusing, and which parts you found most helpful-or won with! But unfortunately, we can't provide a lot of personalized instruction for strategizing as we get far too many requests than there is time to answer.

## YOUR QUESTIONS ANSWERED

We'd like to clear up a few points and address some of the most commonly asked questions.

## What If I Find an Error in the Data?

We update more than two hundred drawings nearly ever weekday each week. (A game that has not been updated for a long time is a dead game that is no longer played.) ADVANTAGE GOLD has all the past winning numbers for all U.S. pick-5 and pick-6 and pick-7 state Lotto games, plus Puerto Rico, as well as hundreds of games from international countries. We try to update the drawings as accurately as possible. But human error may occur. We really do appreciate it when you report an error to us (please be specific about which game and the date of the error), so we can correct it as soon as possible. Use our contact form on our website to report an error.

## How Do I Activate the Smart Picks?

It takes only a few seconds to activate the Smart Picks after your update, go to the main menu of ADVANTAGE GOLD and press 3, then press ESCAPE, press 4, press ESCAPE, press 5, press ESCAPE, press 6, press ESCAPE, press 7, press ESCAPE, press C, press ESCAPE, press D, press ESCAPE. Then press W, and type your response as to the number of Smart Picks you want.

Smart Picks should not be used in new Lotto games with few drawings. Keep in mind that charts require sufficient data to form patterns. Some charts have reliable patterns with 60 drawings or less. Other charts require $200+$ drawings. When you become very familiar with ADVANTAGE GOLD, your trained eye will know how to spot a winning opportunity.

## How Should I Weight the Scoreboard?

Go to chart V to get the Lottery Advantage Scoreboard. It shows, from the top, the numbers chosen by the most charts, and which charts chose which numbers. In answer to questions about which weights to use, this is subjective. If you don't like a particular chart, give it a weight of 0 . Or, if you think a chart is usually pretty accurate, give it a weight of 2 , or even as much as 3. (Keep in mind that a weight of 3 is equivalent to three charts selecting those numbers.)

## Does it Matter Which Lotto Game I Play?

Most states offer at least two Lotto games, a pick-6 which usually has higher jackpots and
much higher odds-and an easier to win pick-5 Lotto game with lower odds and a jackpot paid in a cash lump sum. You'll win pick-5 prizes much more often than you'll win pick-6. Invest the lion's share of your lottery budget in the low-odds pick- 5 Lotto games, or pick-6 games with small number fields, although these are becoming more rare to find.

## Do you have a money back guarantee?

No, we do not guarantee that anyone will win prizes with our software. We guarantee only that all minimum win guarantees in the wheels are mathematically correct with no holes. As for returning or exchanging software, naturally anyone who buys software will install it on their hard disk drive. For that reason, we cannot allow customers to return or exchange software. Even if the disk is returned, the program remains in the customer's computer.


Every day we receive a ton of mail that requires a personal response. We value these letters. They have a direct impact on what we write and how we explain things. But, there simply isn't enough time in a lifetime to answer everyone personally. We have built an extensive FAQ on our website to help with many common questions.

## Why Haven't I Received Any Upgrade Notices Lately?

We are continually working to refine and improve our products with upgrades as well as developing new products. We try to make new important announcements within the software and on our website. You can also follow our blog, facebook page, twitter, or google+ to be among the first to know about lotto news, product updates, and more.

## A FINAL WORD

If you don't understand a chart or a program function, please read the explanation about it again. Of course, you can press the $\boldsymbol{F 1}$ function key or use the Help menu at any time, at every level, throughout the entire program.

Don't let the vast array of selections on the Menu overwhelm you. Each one is there for a specific purpose. Try not to rely entirely on the Smart Picks. When you become familiar with the patterns and probabilities of Lotto number activity in your game, you'll have a more subtle awareness than the computer is capable of.

Once you feel comfortable with ADVANTAGE GOLD, you'll find yourself gravitating to certain charts more often than others. You don't have to use every chart every time you play. Of
course, the more indicators you use, the better your perspective for choosing the winning numbers. These tools help you target and refine, with a greater degree of accuracy, the next set of winning numbers. So you'll have an even better chance of becoming our next Lotto jackpot winner!

For best results, use ADVANTAGE GOLD with wheeling software. Balanced Wheeling Systems allow you to play with large groups of Lotto numbers, which are scientifically placed on your bet slips in a special order that assures a specific win guarantee if some or all of the winners are in the chosen group. Five different wheeling programs are available. Find out more details about each program on our website.

We hope you enjoy using ADVANTAGE GOLD and that you benefit from it in a big way. When you win a jackpot with Smart Luck systems, please let me know about it. We will NOT accept any part of your win, but we will happily add your name to our long growing list of jackpot winners. We will abbreviate your name on our website if requested to protect your identity. We never accept money or gifts from our winners. On the contrary, our jackpot winners get all of our new products FREE. We wish you great success with our strategies and systems.

Best of Luck with Smart Luck!

## If you move, send us a card or email us at techhelp@smartluck.com with your change of address so we can keep you informed of new products and upgrades.

We would also love for you to let us know about any jackpot winners who have publicly claimed they used a Smart Luck system to win, including newspapers articles in which jackpot winners say they used our system. And WHEN YOU WIN YOUR LOTTO JACKPOT, let us know right away!!
Please check us out on the web at:

## www.smartluck.com

For the latest on all of Smart Luck products, free technical support information, free interactive wheeling systems, free history updates, our secure online order system for new and upgrade products, and more.

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