

# Introduction To Lottery Strategies and Systems

## Agenda

- 0 **Company Background and Introduction**
  - History, Why people play, Public service
  - Lotto playing framework
  
- 0 **What Are The Critical Questions?**
  - How much money do I want to win?
  - Which lottery game should I play?
  - How much money should I invest?
  - How should I pick my numbers?
  - What type of system should I use?
  - Should I work with others to win?
  - Does all this thinking and analysis really make a difference?
  
- 0 **Question and Answer Session**

## **Lotto Systems Group Background and Mission**

### **Our Mission:**

- 0 Improve the quality of lottery play through education**
- 0 Increase player's winnings and enjoyment of the games**

### **Our Background:**

- 0 Ryan Wood has provided management consulting for a major lottery book publisher and author, and holds a B.S. in Mathematics and Computer Science from Cal Poly, San Luis Obispo. He has held positions in marketing, sales and engineering at computer, semiconductor and medical imaging firms.**
- 0 Doug Franklin is a 5 out of 6 winner in the CA 6/49 and an avid analyst of all types of lottery systems and strategies. He has an MBA from Golden Gate University in Finance and a B.S. from San Jose State in Finance. He has held positions at the Federal Reserve Bank and Bank of America.**

## History of Lotteries

- 0 The first state lottery occurred in the late 1500's in Europe
- 0 Current wave of lotteries started in New Hampshire in 1963
- 0 In the US last year some \$23 billion was wagered
- 0 Lotto is a worldwide passion: Australia, Canada, Hong Kong and many European countries
- 0 Games vary from pick 5, 6 or 7 out of 30 to 90 numbers
- 0 Daily lotteries include Pick 3 and 4, number and card games
- 0 Jackpot odds vary from 1 in 142,250 to 1 in almost 55,000,000
- 0 Prizes vary from instant cash to 25 year annuities
- 0 33 US States have pick 5 or pick 6 games
- 0 US lottery officials do not promote the use of systems or strategies

## Why do People Play Lotto?

- 0 **People play for the Jackpot money and the fame of being wealthy**
- 0 **People play to have fun "give yourself a thrill", "make your dreams come true"**
- 0 **People play because they are desperate to escape financial problems**
- 0 **People play because they believe they will win, despite the odds**
- 0 **People play to break-even and hope to win the jackpot**
- 0 **People play because they plan to beat the odds through strategy**
- 0 **People play scratchers because it is easy and convenient**

## Why People Do Not Play

- 0 **Playing lotto is a waste of time and money**
- 0 **Winning is a random process and nothing you do can influence your chances**
- 0 **Success is the result of hard work and savings, not "luck"**
- 0 **Gambling is immoral and unethical**
- 0 **The options and potential rewards are poorly communicated**
- 0 **A fear of social embarrassment because friends and peers will not approve**
- 0 **The "fairness" of the lottery is questioned**

## Caution: Gambling Can Be Addictive

- 0 **Researchers estimate that 3% to 5% of adults are compulsive gamblers**
- 0 **Between 1% to 2% of adults are considered pathological gamblers**
- 0 **Gamblers Anonymous 1-800-287-8670**

### 0 **Symptoms of problem gamblers**

- A preoccupation with gambling and past gambling experiences
- The need to gamble increasingly large sums of money
- Restlessness or irritability when trying to reduce or stop gambling
- Gambling to escape depression, anxiety, guilt or a feeling of helplessness
- Gambling to make up losses
- Lying to conceal the extent of gambling
- Forgery, fraud, theft or embezzlement to fund gambling
- Loss of job, educational career or significant relationship because of gambling
- Borrowing to relieve financial situation eroded by gambling
- Repeated efforts to control or stop gambling

**"Winning Through Strategy"**

## Is The Lottery Fair and Honest?

- 0 **Lottery machine technology and process**
  - The numbered balls are changed every few drawings
  - Each set of balls is weighed and multiple sets are used
  - There are sample test draws before and after drawings
  - Auditors watch and record results along with television
  - Major French company manufactures machines and guarantees randomness
  
- 0 **Psychokinesis, or PK, can affect outcomes up to 1% or 2 %**
  
- 0 **The Lottery is a regressive tax on players since less affluent players tend to play more often.**

**Conclusion: The system is fair and honest and only YOU can make a difference by being informed and using mental or analytic strategies.**



## Lotto is More Complicated Than A Quick Pick

- 0 Not all lotto combinations are equal. There are many ways to look at lotto numbers other than by random selection.
- 0 Consider the following:
  - 0 There are odd and even balls
  - 0 You can sum the numbers
  - 0 There are end digits
  - 0 Pairs of numbers
  - 0 Past draw histories
  - 0 Frequency of hits and misses
  - 0 Patterns and groups of numbers
  - 0 Jackpot split forecasts

## Current Scientific Thinking

- 0 **Claim: Every number has the same probability of being selected**
- 0 **Claim: Every six number combination has the same probability of being selected**
- 0 **Therefore: Picking the combination 1,2,3,4,5,6 is as good a bet as any other. This deduction is false because:**
  - If 1,2,3,4,5, 6 had won in the Nov '91 \$88 million Florida drawing, you would have split the prize with 28,283 players.
  - No six consecutive numbers have ever won a lottery anywhere!
- 0 **Myth: There is nothing you can do to improve your odds.**
- 0 **This is totally false! You can improve your odds by:**
  - 1) **Playing more dollars**
  - 2) **Playing the best risk-reward game in the countr**
  - 3) **Wheeling your bets for better 2nd and 3rd prize capture**
  - 4) **Playing with a pool of players, leverage computers, expertise, \$\$**
  - 5) **Eliminating unlikely combinations**

## % Of Various 6/51 Combinations

<u>6/51</u>	<u># of Combinations</u>	<u>% of Total</u>
Six in a row	45	= .000249 %
Five in a row	2071	= .01%
Four in a row	99,498	= .6 %
Four in a row & Pair	2,070	= .01%
Three in a row	652,828	= 3.6 %
Two three in a row	2,068	= .01%
Three in a row & Pair	90,994	= .5%
Three Pair		
Two Pair		
One pair		
No pairs		
<b>Total</b>	<b>18,009,420</b>	<b>= 100%</b>

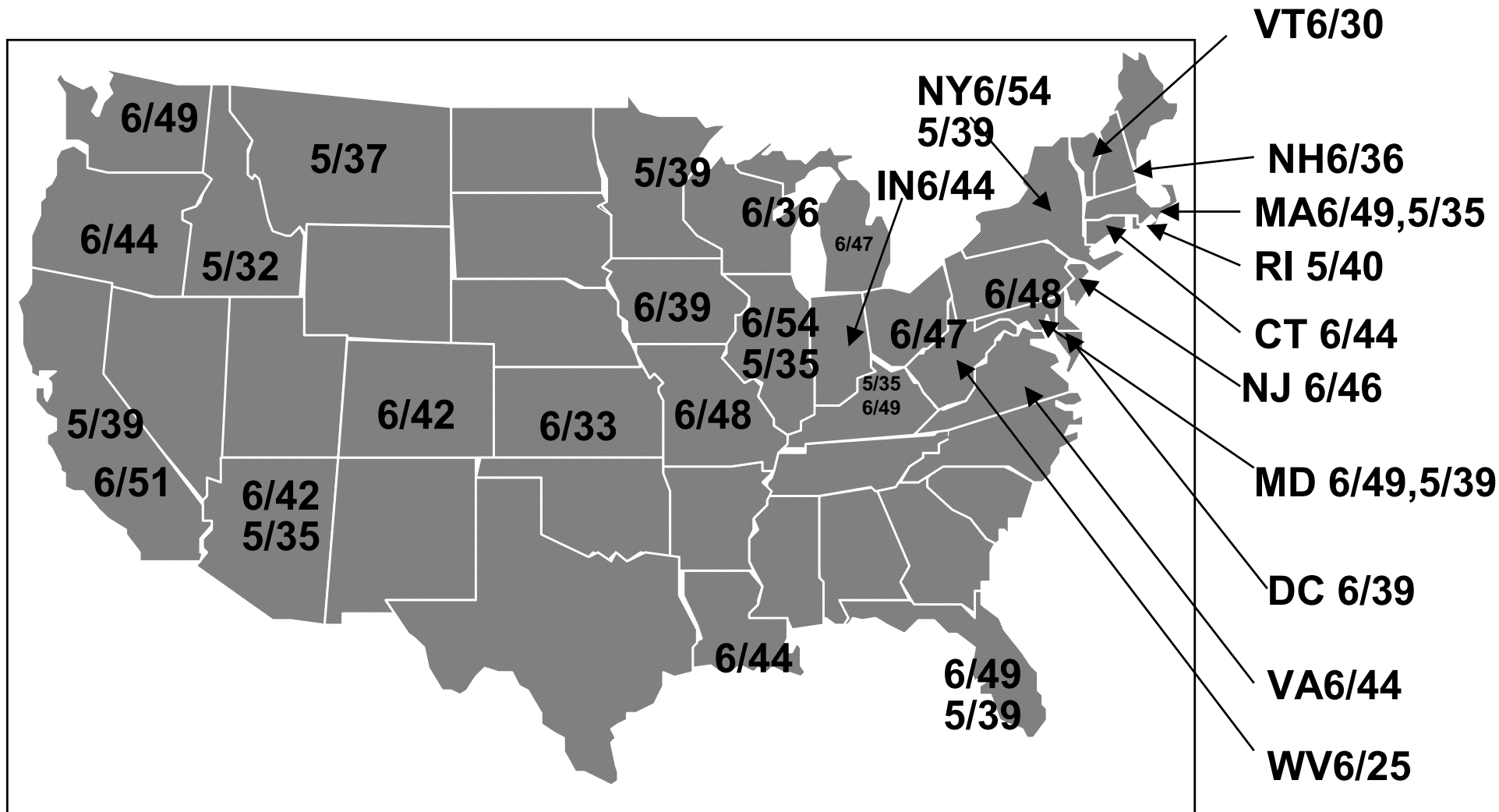
## **Each Lottery Has Different Characteristics**

- 0 Each lottery has different odds**
- 0 Each lottery has different Jackpot prize amounts**
- 0 Each lottery has different 2nd and 3rd prizes and odds**
- 0 Lotteries are played in foreign countries**

## Which Lottery Should I Play?

- 0 **Players have a wide choice of US lotteries to play**
- 0 **You can play your state Lotto or those in neighboring states**
- 0 **Daily pick 3 and 4, or pick 5,6,7 lotteries and Keno type games**
- 0 **You can play International lotteries**
  - Sweden 7/35
  - Australia 6/45 +2B
  - Canada 6/49
  - France 6/49
  - Germany 6/49
  - Italy 5/90
  - UK and Ireland 6/36
  - Austria 6/44

# United States Pick 5 and 6 Games



Lotto America(5/45, 1/45): OR, ID, MT, MO, SD, MN, IA, WI, IN, KY, DC, NJ, RI, ME

Tri-State (6/40): ME, NH, VT

**"Winning Through Strategy"**

## How to Pick the Best Lottery

- 0 Lotteries are based on several key factors:
  - The odds
  - The prize amounts
  - Number of tickets sold during the week
  - The expected number of winners
  
- 0 Each lottery has different annuity years
  
- 0 Each lottery has different number of tickets per dollar
  
- 0 The taxes are different from state to state

## Lotto Game Play Factor Model

- 0 The comparison of one lotto game to another is complicated, but it can be done.
- 0 Each prize from the 1st prize (Jackpot) to free ticket has a cost and value or a "risk-reward" ratio.
- 0 The GPF is the sum of the individual risk-rewards of each prize level

$$\text{GPF} = \text{PF}_{1\text{st Prize}} + \text{PF}_{2\text{nd Prize}} + \text{PF}_{3\text{rd Prize}}$$



## The Jackpot Play Factor Variables

Jackpot Play Factor (JPF) is a figure of merit, derived from the rules each Lottery has adopted, such as: the odds of the game and payout amounts.

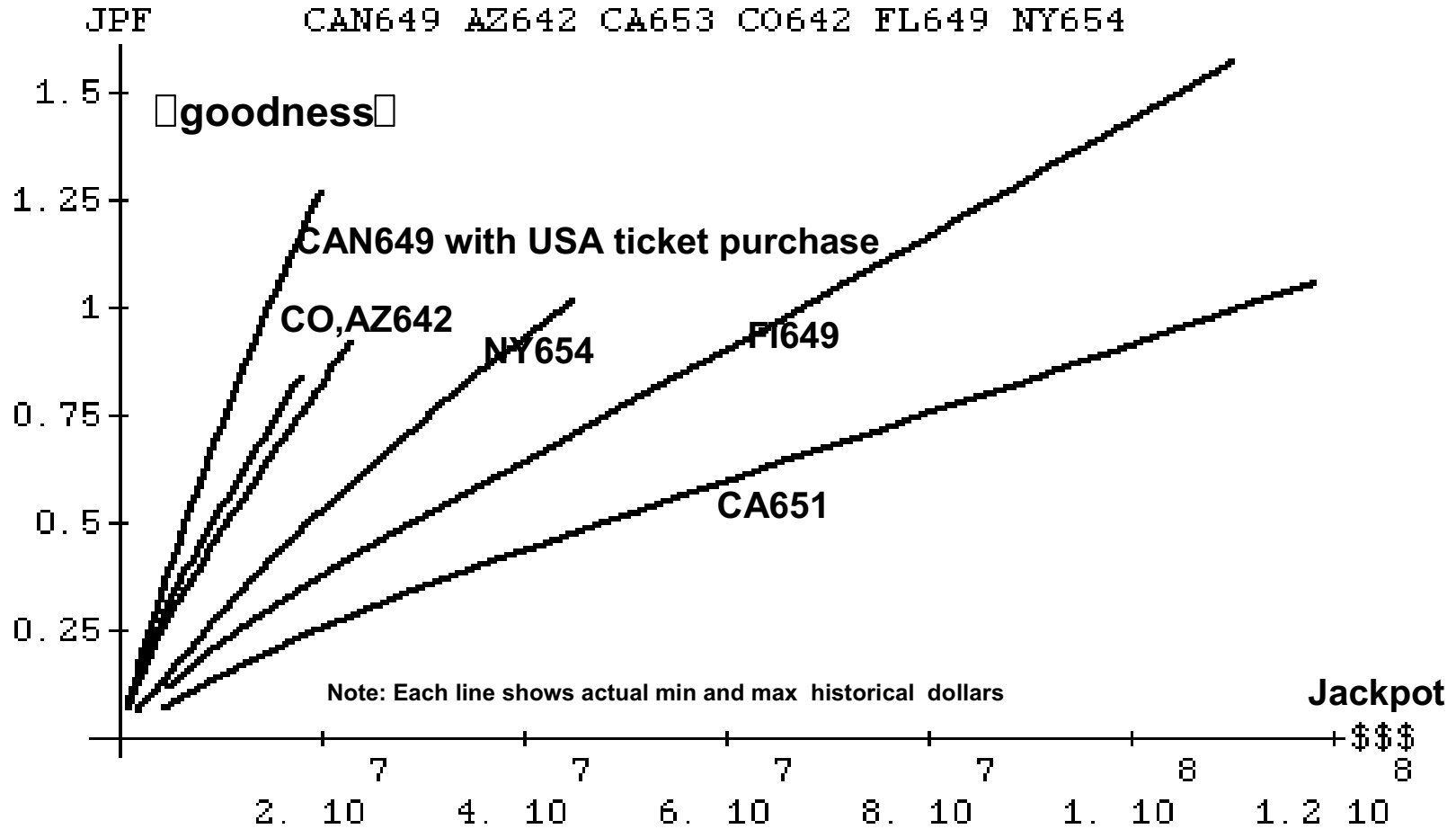
For example, in California's 6/51 game:

The number of balls drawn	$m = 6$
The number of balls that can be drawn	$n = 51$
The % of independent tickets sold	$in = .5$
The number of plays per dollar	$p = 1$
The amount of money bet in dollars	$y = 1$
The foreign exchange rate	$fe = 1$
The % of federal taxes	$ft = .8$
The % of state taxes	$st = 1$
The number of years of payments	$q = 20$
The cost of capital	$coc = .1$
A game's progressive annuity	$pa = 0$
Amount of money in the Jackpot	$e = 2M \text{ to } 150 M\$$

# The JPF Equation

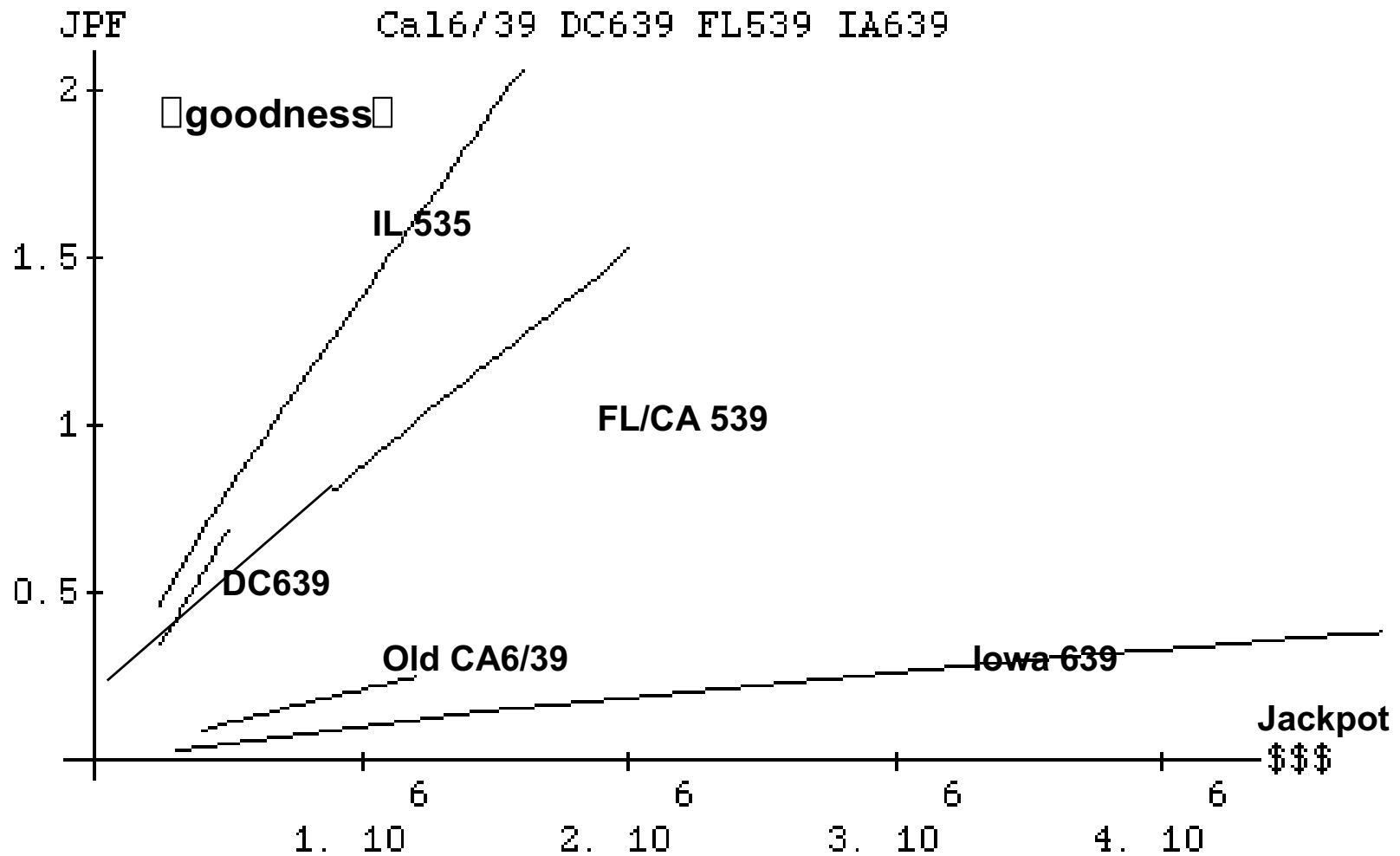
- ✎ **The Jackpot Play Factor (JPF) is a figure of merit for a given lottery as viewed by the player.**
- 0 **It is the probability of winning the 1st prize times the net present value of the money divided by the number of people that may also win the jackpot.**
- 0 **Thus, the Jackpot Play Factor can be thought of as a tool for evaluating the merits of any lottery.**

# Jackpot Play Factor Comparisons



The Jackpot Play Factor integrates all relevant variables to compare and model any lottery with respect to another.

# More JPF Comparisons



## How Much Money Should I Invest?

- 0 It is an individual choice, however play within your means
- 0 Many players spend between 20 to 200 dollars per month
- 0 The more money you bet the better your odds become
- 0 If you play in a lottery pool you can maximize your chances of winning

% of Income	15M	20M	25M	30M	35M	40M	50M	60M	70M	Salary/yr
1%	12	16	21	24	29	32	42	48	58	
2%	25	32	42	50	58	64	84	100	116	Monthly
5%	62	83	104	124	146	166	208	248	292	Amount
10%	125	166	208	250	292	332	416	500	584	
15%	187	249	312	374	438	500	624	748	876	

## Ticket Cost per Drawing

**\$/Month    20    40    60    80    100    120    140    160    200    240    280    320**

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**Draws/Month**

**Dollars per Draw**

<b>4</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>
<b>8</b>	<b>3</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>18</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>	<b>40</b>
<b>12</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>17</b>	<b>20</b>	<b>24</b>	<b>27</b>
<b>16</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>13</b>	<b>15</b>	<b>18</b>	<b>20</b>
<b>20</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>16</b>
<b>24</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>12</b>	<b>14</b>

**Note: Fractions have been rounded to next dollar**

## Pick 5 And 6 Prize Odds By Game

<u>Pick 5</u>	<u>5/5</u>	<u>4/5</u>	<u>3/5</u>
<u>2/5</u>			
5/35	324,632	2,164	75
5/39	575,757	3,387	103
10			
5/40	658,008	3,760	110
<u>Pick 6</u>	<u>Jackpot</u>	<u>5/6+B</u>	<u>5/6</u>
<u>3/6</u>			<u>4/6</u>
5/52	2,598,960	11,059	240
6/34	672,452		4003 119
6/36	1,947,792		10,822 299
24			
6/39	3,262,623	543,771	16,993 412
30			
6/40	3,838,380		18,816 456
32			
6/42	5,245,786		24,286 555
6/44	7,059,052		30,961 669
6/45	8,145,060	1,357,510	36,689 733
6/46	9,366,819	1,561,137	40,029 801
47	<b>"Winning Through Strategy"</b>		
6/49	13,983,816	2,330,636	55,491 1,032

# Odds Chart Based on Tickets Purchased

Game	Plays/\$\$	10	20	40	50	100	250
<u>1000</u>							
5/30	1	14250	7125	3562	2850	1425	570
142							
5/35	1	32463	16231	8116	6493	3246	1299
325							
5/36	1	37699	18214	9425	7540	2770	1502
377							
5/39	1	57576	28787	14394	11515	5758	2303
576							
5/40	1	65800	32900	16450	13160	6580	2632
658							
6/30	1	59378	29689	14845	11876	5938	2375
594							
6/33	2	55378	26689	13844	11075	5538	2215
554							
6/36	1	194779	97395	48956	38956	19478	7791
1948							
6/36	2	97389	48695	24347	19478	9739	3896
974							
6/38	1	276,068	138034	69017	55214	27607	11043
2761							
<b>"Winning Through Strategy"</b>							
6/39	1	326262	163131	81566	65252	32626	13050



## Lotto Number Selection Methods

- 0 Quick Pick
- 0 Birthday System
- 0 Unpopular Numbers
- 0 Hot/Cold Numbers
- 0 Astrology/Numerology
- 0 Precognition (PSI)
- 0 Combination Analysis
- 0 Best Bets

## Lotto Number Selection Evaluation Criteria

### Importance

- |   |   |      |
|---|---|------|
| 0 | Number distribution quality                                   | High |
| 0 | Prize share maximization.....multiple wins, not sharing prize | High |
| 0 | Cost to implement....computer software,900# calls             | Med  |
| 0 | Ease of Use   | Med  |
|   | -Playslip completion  |      |
|   | -System implementation  |      |
|   | -Time to use or complete                                      |      |
| 0 | Emotional pleasure  | Med  |
| 0 | Scientifically supported methodology                          | Med  |
| 0 | Potential for an exact hit                                    | Med  |
| 0 | Randomness  | Low  |

## Ranking of Lotto Selection Methods

0 After rating each method on a scale of 1-5 and multiplying the score times the weighting factor, the following results emerge:

- Max 90pts

0 Best to Worst

Combination Analysis	68 score	75%
Precognition (PSI)	60	66%
Unpopular numbers	58	64%
Best Bets	54	60%
Hot/Cold numbers	52	57%
Quick Pick	47	52%
Birthday System	45	50%
Astrology/Numerology	43	43%

## Lotto Computer Software Tools

- 0 **MacLotto--Wheeling, random number generation, unpopular numbers, \$99.00 plus tax, from MathLabs, 18 Main St Concord, MA**
  
- 0 **Versa-Bet--Complete draw history, Hot/Cold, Best Bets, supports daily 3/4 and pick 5,6,7 games, wheeling is available, \$89.95 from JPM Computer, P.O. Box 30742, Portland OR 97230**
  
- 0 **Lottery Dollars -- Analyzes and stores wheeling systems. Generates "tables of winnings" for each wheel, \$79.95 from LSI Publishing, Inc., 1259 El Camino Real, Suite 217, Menlo Park, CA 94025.**
  
- 0 **Lottery Tracker and Wheeler -- Includes wheeling systems, numerical analysis, graphics, stores winning numbers, \$49.95 from Entertainment On-Line, Inc., Westborough MA 01581**
  
- 0 **Note: Write for information and ask about special sales.**

## **What Type of Systems are Available?**

- 0 **Lottery systems come in many different forms depending on your prize goals, cash available and how and why you select each number.**
- 0 **Wheeling systems**
- 0 **Jackpot traps, which is a different form of wheeling system**
- 0 **Lottery pools**
- 0 **Technical analysis using hot or cold numbers and other techniques**
- 0 **Game Play Factor (GPF) comparisons can choose the best lottery**
- 0 **Unusual number selection methods**

## Do Strategies and Systems Make a Difference?

- 0 Lotto is more complicated than a quick pick.
- 0 Over 1,300 of the 120,000 winners of 5/6 or 6/6 in all of the California games have won two or more prizes in separate drawings.  
-Assuming a \$28 investment the odds are 1 in 2,907, yet the winners are performing at a 1 in 100 level some 29 times better than chance.
- 0 There are back to back winners and multiple jackpot winners that use a strategy.
- 0 With a system you can win more often with less "luck"

## Characteristics of Successful Lotto Players

- 0 **They are lucky in varying degrees**
- 0 **Consistent and patient regular players**
- 0 **Many use a system or strategy especially for 2nd and 3rd prizes**
- 0 **Winners have a financial commitment and discipline**
- 0 **Fully one third have a religious and psychic experience before winning**

## What Is Wheeling?

- 0 **Wheeling is a technique to maximize the number of second and third prizes that are won based on a series of bets**
  
- 0 **For example, if you know what the winning numbers will be, buy a \$1 ticket. However, if you think the winning numbers are within a group of 10 numbers, then you use a wheel to capture the winning combination.**
  
- 0 **A full wheel is the complete set of combinations for a given number. For example :**
  - 10 number full wheel costs \$210**
  - 12 number full wheel costs \$924**
  - 14 number full wheel costs \$3,003**
  
- 0 **If all six winning numbers fall within the 10 numbers selected and wheeled, then you win:**
  - 1 grand prize 6/6**
  - 24 second prizes 5/6**
  - 90 third prizes 4/6**



## Are There Other Types of Wheeling Systems?

- 0 Key number wheels assume that you think you know what one or more of the winning numbers will be.
- 0 Abbreviated wheels have different win guarantees and lower investment \$
- 0 Wheels that combine multiple pairs of numbers (any two numbers)
- 0 Positional wheels focus on the fact that winning numbers fall into specific ranges and patterns
- 0 Groups (2 to 6) of numbers are yet another variation of wheeling systems
- 0 Wheels that combine key numbers, multiple pairs, and multiple groups
- 0 Look at the table of characteristics of abbreviated win-guaranteed wheels

## Win Guarantees For Wheels

Pick 6

Pick 5

<u>Total #'s</u>	<u>6/6</u>	<u>5/6</u>	<u>4/6</u>		<u>5/5</u>	<u>4/5</u>	<u>3/3</u>
8	28	4	2		56	6	9
10	210	16	3	# of Combinations required	252	14	17
12	924	68	14		792	48	31

## Should I Scratch or Play Lotto?

- 0 **Scratchers provide the WORST odds of winning over \$10**
- 0 **Scratchers usually provide the BEST odds of winning \$2 or \$10**
- 0 **Scratchers are a passive, throw-a-way investment relying 100% on luck**
- 0 **Scratchers require you to redeem the ticket at the location purchased or mailed to the state lottery commission, 2-3 weeks to redeem**
- 0 **Scratchers make convenient prizes for group organizations**

## CA 5/39 Observations And Rules

**Observation: 97% of the winning numbers have a mixture of odd and even numbers, distributed 3/2 or 4/1**

***Rule:* Eliminate bets with all odd or even numbers.**

**Observation: 83% of winning numbers have either no end digits in common or 2 end digits in common.**

***Rule:* Play only combinations with either no end digits or two end digits in common**

**Observation: 74% of the winning drawings include one or more numbers over 31.**

***Rule:* Avoid the birthday systems that use numbers 1 to 31 exclusively**

**Observation: 69% of the winning drawings have 1 or 2 numbers from the previous 2 drawings.**

***Rule:* Use no more than two previous numbers in any single combination**

**Observation: 88% of the time a winning number will not repeat 3 or more drawings**

***Rule:* Do not bet combinations that repeat a winning number for a third drawing in a row**

## CA 6/51 Lotto Observations and Rules

**Observation:** 77 % of the winning numbers have a mixture of odd and even numbers, distributed 3/3 or 2/4 or 4/2

**Rule:** Eliminate bets that have too many odd or even numbers.

**Observation:** 87% of winning numbers have either no end digits in common, 2 end digits in common or no more than two occurrences of 2 end digits in common.

**Rule:** Play only combinations with either no end digits, two end digits or two sets of two end digits in common

**Observation:** There is a large difference in the JPF of lotteries.

**Rule:** Play only the lotteries that offer the highest risk/reward ratio or Jackpot Play Factor

**Observation:** 70% of all winning combinations have a sum of numbers that fall within a specific range. See Advanced Seminar

**Rule:** Do not bet numbers that are outside of the sum window, either too low a sum or too high

## CA 6/51 Observations and Rules

**Observation: 93% of the winning drawings include one or more numbers over 31.**

***Rule: Avoid the birthday systems that use numbers 1 to 31 exclusively***

**Observation: 65% of the winning drawings have 1 or 2 numbers from the previous 2 drawings.**

***Rule: Use no more than two previous numbers in any single combination***

**Observation: 85% of the time a winning number will not repeat 3 or more drawings**

***Rule: Do not bet combinations that repeat a winning number for a third drawing in a row***

**Observation: 90% of winning combinations will have no pairs, or only one pair of numbers**

***Rule: Eliminate all combinations with more than one pair of numbers***

## What Are The Benefits of Pools?

- 0 Pools will increase the odds of winning all types of prizes.
- 0 Pools can leverage the best systems and knowledge easily because more money is available.
- 0 Avoid pools that have a high overhead, like for every \$1 bet you pay \$2
- 0 Pools simplify the process of playing lotto
- 0 Reduce overall costs for individual players
  - less time and hassle
  - better odds
  - more wins
- 0 Insulates winner from state authority's computer tracing

## Summary: How To Improve Your Odds

<u>Method</u>	<u>Impact</u>
1) Play more dollars	Divides odds
2) Play the best game in the country at the moment	1 to 30 times
3) Split with as few people as possible, bet timing is key.	1 to 5 times
4) Use a wheeling system to pick up more second and third prizes	1 to 3 times
5) Eliminate losing bets based on observations and rules	Saves up to 30%
6) Do not buy scratchers, convert \$\$ to Lotto	1 for 1 Savings
7) Convert Quick Pick dollars to Lotto	1 for 1 Savings