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# An Elderly Mathematician Hacked the Lottery for \$26 Million

How Jerry Selbee thrived with a simple algebraic solution.



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[Author](#) via istock photos

On a fateful Saturday morning, Marge Selbee walked into the kitchen to fire up a pot of coffee.

Her husband, Jerry, was drawing on a notepad. Numbers and formulas danced across his page like a stiff-armed ballerina. This wasn't unusual for him.

Sipping on coffee, Marge turned to him, "What are you working on?"

He looked up, "I think I've cracked the Michigan State Lottery."

Marge laughed and didn't think much of it. Yet as she finished her coffee, her husband sat beside her with a \$26-million-dollar secret.

## The irony of two straight edge lottery hustlers

The Lottery has a well-earned mystique. It's a mountain of cash, shrouded in impossible math, with the subtle promise of bliss and freedom.

In many ways, Jerry was the perfect candidate to spot a hole in the system. Despite his humble life, he had a master's in mathematics and from a young age, could solve problems that adults struggled with. Like other gifted people, answers seemingly leapt out of the fog and into his lap.

There was also great irony in his future heist. The Selbees never drank, smoked, did drugs, or gambled. Caffeine was their only vice.



Author via [Insider](#)

Jerry Selbee took an unconventional path after college. He worked in sales, factories, offices, all before growing tired of working for “the man”.

Having six kids and a wife to provide for, they decided to open, of all things, a convenience store in Evart, Michigan.



Actual grocery store. Author pic highline

Multi-millions couldn't have seemed further away.

## The Path to Riches

For years, they sold run-of-mill goods but did better than most stores. Jerry analyzed prices from suppliers. Then, he identified margins and resold supplies to small retailers for a profit. He also had graphs and analytics on the earnings per square foot of his store. Jerry maximized everything.

They eventually bought and owned one of the only lottery machines in Evart county. People streamed in from miles away to chase the impossible dream.

The Selbees never spent a dollar on lottery tickets. Jerry's bond with numbers and mathematics made it an obvious decision. For fun, he studied the figures on the back of the tickets and marveled at people's willingness to play.

## The arrival of a special game changes things

In 2003, an unusual lottery game, Winfall, was released.

### The premise was simple:

- Pick six numbers between 1 and 49
- If you guessed two, three, four, or five numbers, you get a prize in increasing amounts.
- Guess six, you win the \$2 million minimum.

If nobody won, the lottery purse went up each week. After 6 weeks, or when the jackpot hit the \$5M dollar cap, they did a "Roll Down". A Roll Down occurs when winnings are spread downwards to lower tier winners, at 5, 4, and 3 level matches.

The State Lottery made a mistake in all this. They listed the odds of winning that was associated with each combination of numbers.

The math explanation could fill an article itself. But the short version, Jerry studied those winning odds, and the timing of those Roll Downs. He realized that, statistically, a single one dollar lottery ticket was worth more than one dollar in those final weeks.

## The plan rolls into action

He knew he'd need to bet big to create a justifiable margin. In his first attempt, he bought \$2,000 in tickets, which was an uncomfortably large sum for a man who never gambled.

He ended up losing \$50. He reckoned this was bad luck and within the margin of error and realized he needed to wager more.

Three months later, the next rolldown was announced. He buys a full \$8,000 in tickets. His winnings total \$15,700, leaving him a \$7,700 profit. From here, things escalated.

Each week his bets soared higher and higher. Some weeks, he spent hundreds of thousands of dollars. The game required you buy the tickets in person. So when a rolldown was coming, he and his wife split up into two cars and hit countless

convenience stores across the state.

The government, with its usual iceberg reaction time, didn't notice anything strange. The Selbees continued this mission for a full decade without the state noticing. Eventually, a group of students at MIT noticed a flaw in the math too, and started buying up tickets.

Finally, a news story broke the lid open on the scheme and the local lottery officials shut down the game.

But at this point, Jerry had won more than \$26 million dollars from the state lottery. After deducting for expenses, they took in more than \$8 million in profit.

And what makes this story even better? The couple. They were in their 70s at the end of this run and the money hasn't changed them a bit.

All they've done is renovate their house and pay for their 14 grandchildren's college funds.

No law was ever broken. A clever man, with a mathematical curiosity, spotted a hole and stepped through it.



Author via CBS

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