A Diversionary Breather

by Joseph DeMaio, ©2023

abbiefyregraphics, Pixabay, License

(Jul. 30, 2023) — As a diversionary breather from your humble servant's usual periodic missives on the presidential eligibility issue and the serial offerings on the unfolding cataclysm of the clown masquerading as a "president" of the Republic – no need to mention his name – the following is a brief refresher course on lotteries. More specifically, it is a simplified tutorial on the "likelihood" – rather than the "odds" – of hitting a Powerball or Mega Millions "jackpot."

Specifically, in the United States, many states have turned to lotteries to supplement their budgetary needs. Quite apart from the fiscal and moral arguments for and against such government-run lotteries, the fact is that they exist. Moreover, there seems to be no end in sight for the expansion of state-run lotteries except in the states of Alaska, Alabama, Hawaii, Utah and – duh – Nevada, which prohibit lotteries under their respective constitutions and/or statutes. The two biggest multi-state lotteries, operated by the Multi-State Lottery Association, are the Powerball and Mega Millions lotteries. Virtually no person purchases a ticket or tickets hoping to win anything *other* than the "jackpot." "You can't win if you don't play" is a powerful inducement.

But few people understand (or care to understand) the likelihood of a single particular ticket being the one to score the "jackpot." But with both the Powerball and Mega Millions jackpots usually climbing into the tens, or hundreds of millions – and occasionally the billions of dollars – the allure of purchasing one (or frequently many more) tickets frequently becomes irresistible. This is, by definition, approaching a problematic gambling addiction.

The point of this tutorial, however, is not to scold or seem judgmental. The point is simply to graphically depict the "likelihood" of a single ticket scoring a "jackpot." Stated otherwise, based on the number of "white" balls in one set, and "red" balls in the "Powerball" set, the mathematical odds of a jackpot combination being "matched" or "achieved" are (as of July 30, 2023) 1 in 292,201,338. Check the back of a Powerball "How to Play" slip to confirm. Similarly, the odds of matching a Mega Millions jackpot, based on the "winning" combination of white balls and a red Mega Millions ball are (as of July 30, 2023) 1 in 302,575,350.

More graphically, for each of the two lotteries, imagine a road measured with millions of tiny toothpick-flagged inch marks into the distance. The hopeful player's task is to either manually pick the right "inch" mark for the "winner-winner-chicken-dinner" jackpot combination or hope the retailing computer, via the "quick pick" random option, will do it for them. Easy-peasey.

Now, faithful *P&E* reader, you may want to sit down. For the Powerball lottery, that road would stretch from Anchorage, Alaska to a point 14 miles west of Jacksonville, Florida, or 4,612 miles. For the Mega Millions lottery, the road is a bit longer, stretching from Anchorage to a point 29 miles south of Tampa, Florida, or about 4,775 miles. To score the jackpot, just pick the "right" toothpick-flagged inch. Soooo…, if the choice is between food on the table and a longshot jackpot, the "smart money" goes to milk and eggs…, and maybe some bread. Just sayin'.