

## IT'S OLNEY MATH

Greg Coxson

May, 2022

One of the best things about the Olney Market is the chance to talk with interesting people and make new friends. Recently I met a woman who told me that the parents of two of her friends were fascinated with numbers, and in particular, they love prime numbers, that is, integers  $N$  whose only multiplicative factors are 1 and  $N$ . In fact, these parents planned the births of their children so that they would graduate from college two years apart in years that are prime numbers. Such pairs of primes having a difference of 2 are called "twin primes" (for example, 5 and 7, or 17 and 19). I asked her, what are their years of graduation? When she told me, I said, guess what, not only are they twin primes, but if you sum the digits of each year, you get another set of twin primes. What are those remarkable twin primes?

This puzzle competition is for contestants in 5th grade to 12th grade. When you find a correct solution, report it expeditiously to the Olney Farmers Market organizers. If you do before anyone else does, you win the gift certificate! Thanks for being a friend of the Olney Farmers Market!