

Name: _____

The Goldbach Conjecture.

Some background.

I present to you the first twenty **prime numbers**

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, ...

The Conjecture.

Every even integer greater than two can be written as the sum of two primes.

Experimental evidence.

$$4 = 2 + 2, \quad 6 = 3 + 3, \quad 8 = 3 + 5, \quad 10 = 3 + 7, \quad 12 = 5 + 7.$$

Can you keep going?

$14 = \underline{\quad} + \underline{\quad}$

$16 = \underline{\quad} + \underline{\quad}$

$18 = \underline{\quad} + \underline{\quad}$

$20 = \underline{\quad} + \underline{\quad}$

$22 = \underline{\quad} + \underline{\quad}$

$24 = \underline{\quad} + \underline{\quad}$

$26 = \underline{\quad} + \underline{\quad}$

$28 = \underline{\quad} + \underline{\quad}$

$30 = \underline{\quad} + \underline{\quad}$

$32 = \underline{\quad} + \underline{\quad}$

$34 = \underline{\quad} + \underline{\quad}$

$36 = \underline{\quad} + \underline{\quad}$

$38 = \underline{\quad} + \underline{\quad}$

$40 = \underline{\quad} + \underline{\quad}$

$42 = \underline{\quad} + \underline{\quad}$

$44 = \underline{\quad} + \underline{\quad}$