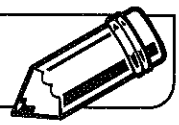
Name Date Time

LESSON 1•6

Goldbach's Conjecture *continued*



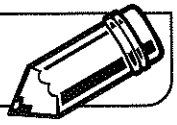
Write each number below as the sum of two prime numbers.

4 2 + 2	6	8	10	12
14	16	18	20	22
24	26	28	30	32
34	36	38	40	42
44	46	48	50	52
54	56	58	60	62
64	66	68	70	72
74	76	78	80	82
84	86	88	90	92
94	96	98	100	102

Name Date Time

LESSON 1·6

Goldbach's Conjecture



1. Write each of the following numbers as the sum of two prime numbers.

Examples: 56 = 43+13 26 = 13+13

a. 6 = _____ **b.** 12 = _____

c. 18 = _____ **d.** 22 = _____

e. 24 = _____ **f.** 34 = _____

The answers to these problems are examples of **Goldbach's Conjecture.** A **conjecture** is something you believe is true even though you can't be certain that it is true. Goldbach's Conjecture might be true, but no one has ever proven it. Anyone who can either prove or disprove Goldbach's Conjecture will become famous.

2. Work with a partner. Find and write as many of the addition expressions as you can for the numbers in the grid on page 19.

3. Can any of the numbers in the grid be written as the sum of two prime numbers in more than one way? If so, give an example. Show all possible ways.

_____

_____

_____

Try This

4. Write 70 as the sum of two primes in as many ways as you can.

_____

_____