

Name: \_\_\_\_\_

## Proper Factors and Perfect Numbers

**Factors** are the numbers you multiply to get another number.

$$2 \times 3 = 6 \quad 2 \text{ and } 3 \text{ are factors of } 6.$$

$$1 \times 6 = 6 \quad 1 \text{ and } 6 \text{ are also factors of } 6.$$

What are the factors of 6? 1, 2, 3, and 6

**Proper Factors** are the factors of a number other than the number itself.

What are the proper factors of 6? 1, 2, and 3

A **perfect number** is a number that, when you add all of the proper factors together, you get the number.

The sum of 1, 2, and 3 is 6. Therefore 6 is a perfect number.

Perfect numbers are rare. There are only 48 known perfect numbers.

List the proper factors for each number below.  
Be sure the factors are listed in order, from least to greatest.

a. 30

b. 22

c. 36

e. 15

g. 24

h. 28

i. 32

j. 23



One of the numbers above is a perfect number. Draw a star next to it when you find it.

# ANSWER KEY

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One of the numbers above is a perfect number. Draw a star next to it when you find it. (28)