Name _____ Date _____

1. Explain your thinking or use division to answer the following.

a. Is 2 a factor of 72?	b. Is 2 a factor of 73?
c. Is 3 a factor of 72?	d. Is 2 a factor of 60?
e. Is 6 a factor of 72?	f. Is 4 a factor of 60?
g. Is 5 a factor of 72?	h. Is 8 a factor of 60?

2. Use the associative property to find more factors of 12 and 30.

a. $12 = 6 \times 2$

$= (\_\_\_ \times 2) \times 2$

$= \_\_\_ \times (2 \times 2)$

$= \_\_\_ \times \_\_\_$

$= \_\_\_$

b. $30 = \_\_\_\_ \times 5$

$= (\_\_\_\_ \times 3) \times 5$

$= \_\_\_\_ \times (3 \times 5)$

$= \_\_\_\_ \times 15$

$= \_\_\_\_$

3. In class, we used the associative property to show that when 6 is a factor, then 2 and 3 are factors, because $6 = 2 \times 3$. Use the fact that $10 = 5 \times 2$ to show that 2 and 5 are factors of 70, 80, and 90.

$70 = 10 \times 7$ $80 = 10 \times 8$ $90 = 10 \times 9$

4. The first statement is false. The second statement is true. Explain why, using words, pictures, or numbers.

If a number has 2 and 6 as factors, then it has 12 as a factor.
If a number has 12 as a factor, then both 2 and 6 are factors.