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?

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

a. $12 = 6 \times 2$ b. $30 = $ ____ $\times$ 5

$= ($ ___ $\times$ 2$) \times$ 2 $= ($ ____ $\times$ 3$) \times$ 5

$= $ ___ $\times$ (2×2) $= $ ____ $\times$ (3×5)

$= $ ___ $\times$ ___ $= $ ____ $\times$ 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.

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