Name _____ Date _____

Properties of Multiplication: Commutative, Associative and Distributive

Directions: You can switch factors, group them in a new way, or break a fact apart. Each question uses one of these moves.

1. You know that $7 \times 3 = 21$. What is 3×7?

_____

2. Use the fact $9 \times 4 = 36$ to finish the turned-around fact.
$4 \times$ _____ = _____

3. Which equation is true because two factors can be multiplied in either order?
A. $8 \times 6 = 8 \times 8$
B. $8 \times 6 = 8 + 6$
C. $8 \times 6 = 86$
D. $8 \times 6 = 6 \times 8$

4. Multiply three numbers: $2 \times 5 \times 7$. Start with $2 \times 5 = 10$. What is the product of all three numbers?

_____

5. Find $4 \times 2 \times 3$ by multiplying the last two numbers first.
$2 \times 3 =$ _____, and then $4 \times 6 =$ _____.

6. Which is another way to find 7×6?
A. Find 5×6 and 2×6, then multiply the two products.
B. Find 5×6, then add 2.
C. Find 5×6 and 2×6, then add the two products.
D. Find $7 + 6$, then double it.

7. You know that $8 \times 5 = 40$ and $8 \times 2 = 16$. Use those two facts to find 8×7.

_____

8. Split 7×9 into 7×5 and 7×4. Type the two products.
$7 \times 5 =$ _____ and $7 \times 4 =$ _____. Together they make $7 \times 9 = 63$.

9. Lena knows that $7 \times 2 = 14$. She sets up 2 rows of 7 chairs. How many chairs does she set up?

_____ chairs

10. A floor pattern has 5 rows of 4 red tiles and 3 rows of 4 blue tiles. How many tiles are in the pattern?

_____ tiles