Name:_____ Date:_____

Definitions

Commutative property: When we multiply two numbers, the order of the numbers does not matter. For example: $4 \times 7 = 7 \times 4 = 28$. This means "4 groups of 7" gives the same total as "7 groups of 4".

Instructions

For each problem, write the product in groups in two different ways. Add the groups together to show they are equal.

Example

Problem: $3 \times 4 = 4 \times 3$

3×4 means "3 groups of 4"

$$\begin{aligned} 3 \times 4 &= 4 + 4 + 4 \\ &= 12 \end{aligned}$$

4×3 means "4 groups of 3"

$$\begin{aligned} 4 \times 3 &= 3 + 3 + 3 + 3 \\ &= 12 \end{aligned}$$

Answer: $4 + 4 + 4 = 3 + 3 + 3 + 3 = 12$.

1. $3 \times 6 = 6 \times 3$
2. $4 \times 7 = 7 \times 4$
3. $2 \times 9 = 9 \times 2$
4. $5 \times 3 = 3 \times 5$
5. $7 \times 6 = 6 \times 7$
6. $8 \times 4 = 4 \times 8$
7. $9 \times 5 = 5 \times 9$
8. $3 \times 8 = 8 \times 3$
9. $6 \times 4 = 4 \times 6$
10. $7 \times 9 = 9 \times 7$
11. $2 \times 8 = 8 \times 2$
12. $5 \times 6 = 6 \times 5$
13. $4 \times 9 = 9 \times 4$
14. $3 \times 7 = 7 \times 3$
15. $8 \times 6 = 6 \times 8$
16. $5 \times 7 = 7 \times 5$
17. $9 \times 3 = 3 \times 9$
18. $4 \times 6 = 6 \times 4$
19. $7 \times 8 = 8 \times 7$
20. $2 \times 5 = 5 \times 2$
21. $6 \times 9 = 9 \times 6$
22. $3 \times 4 = 4 \times 3$
23. $8 \times 7 = 7 \times 8$
24. $5 \times 4 = 4 \times 5$
25. $9 \times 8 = 8 \times 9$
26. $3 \times 10 = 10 \times 3$
27. $6 \times 2 = 2 \times 6$
28. $7 \times 5 = 5 \times 7$
29. $4 \times 8 = 8 \times 4$
30. $2 \times 3 = 3 \times 2$
31. $10 \times 9 = 9 \times 10$
32. $5 \times 5 = 5 \times 5$
33. $8 \times 9 = 9 \times 8$
34. $4 \times 3 = 3 \times 4$
35. $7 \times 2 = 2 \times 7$
36. $6 \times 10 = 10 \times 6$
37. $9 \times 9 = 9 \times 9$
38. $3 \times 5 = 5 \times 3$
39. $4 \times 10 = 10 \times 4$
40. $7 \times 7 = 7 \times 7$