

Name: _____

Score: _____

Balancing EquationFind the value of x to balance the equation. Identify the property used.

1) $7 + (3 + 4) = (7 + x) + 4$ $x =$ _____ Property: _____	2) $x + 6 = 6 + 5$ $x =$ _____ Property: _____
3) $8 \times 5 = 5 \times x$ $x =$ _____ Property: _____	4) $11 \times (3 \times 6) = (x \times 3) \times 6$ $x =$ _____ Property: _____
5) $9 + x = 12 + 9$ $x =$ _____ Property: _____	6) $(6 \times x) \times 4 = 6 \times (8 \times 4)$ $x =$ _____ Property: _____
7) $8 + 6 = 6 + x$ $x =$ _____ Property: _____	8) $2 \times x = 3 \times 2$ $x =$ _____ Property: _____
9) $13 \times (4 \times 6) = (13 \times 4) \times x$ $x =$ _____ Property: _____	10) $(10 + 4) + x = 10 + (4 + 7)$ $x =$ _____ Property: _____
11) $x + (14 + 8) = (3 + 14) + 8$ $x =$ _____ Property: _____	12) $x \times 11 = 11 \times 5$ $x =$ _____ Property: _____
13) $(7 \times 2) \times 12 = 7 \times (2 \times x)$ $x =$ _____ Property: _____	14) $15 + 7 = 7 + x$ $x =$ _____ Property: _____

Determine which property of multiplication is shown (Associative, Identity, Distributive or Commutative).

Answers

1) $(0 \times 7) \times 4 = 0 \times (7 \times 4)$

1. _____

2) $(1 \times 0) \times 9 = 1 \times (0 \times 9)$

2. _____

3) $(4 \times 5) + (4 \times 1) = 4 \times (5 + 1)$

3. _____

4) $1 \times 1 = 1$

4. _____

5) $6 \times (10 + 7) = (6 \times 10) + (6 \times 7)$

5. _____

6) $2 \times 9 = 9 \times 2$

6. _____

7) $(6 \times 2) \times 5 = 6 \times (2 \times 5)$

7. _____

8) $5 \times 10 = 10 \times 5$

8. _____

9) $3 \times 1 = 1 \times 3$

9. _____

10) $1 \times 4 = 4$

10. _____

11) $4 \times 7 = 7 \times 4$

11. _____

12) $6 \times 1 = 6$

12. _____

13) $0 \times (3 \times 2) = (0 \times 3) \times 2$

13. _____

14) $3 \times (2 + 7) = (3 \times 2) + (3 \times 7)$

14. _____

15) $9 \times 1 = 9$

15. _____

16) $2 \times 1 = 2$

16. _____

17) $5 \times (1 \times 2) = (5 \times 1) \times 2$

17. _____

18) $4 \times (7 + 1) = (4 \times 7) + (4 \times 1)$

18. _____

19) $5 \times 6 = 6 \times 5$

19. _____

20) $(3 \times 7) + (3 \times 9) = 3 \times (7 + 9)$

20. _____