

Simplify each side of the equation and tell if the statement is true or not.

1.  $9 + 6 = 6 + 9$

4.  $(5 + 3) + 8 = 5 + (3 + 8)$

2.  $21 \div 7 = 7 \div 21$

5.  $(9 - 4) - 2 = 9 - (4 - 2)$

3.  $10 - 4 = 4 - 10$

Rewrite each expression using the Commutative Property.

6.  $5X + 4$

9.  $15 \times 40$

7.  $9 \times 6$

10.  $A + BC$

8.  $3Y + 2X$

Rewrite each expression using the Associative Property.

11.  $(X + 10) + 12$

14.  $(T \times 7) \times 9$

12.  $7 \times (2 \times 9)$

15.  $X + (9 + 8)$

13.  $6B + (2B + 13B)$

Use the Associative and Commutative Properties to simplify the expressions by combining like terms.

16.  $5A + 2B - 2B - 2A - 3B$

19.  $4Y - 2 + 3Y - 1 - 5Y$

17.  $9X + Y - 3X + 8Y$

20.  $2X + 8 - X + 2$

18.  $7Q + 4R - R + 2Q + 3Q - 5R$

21.  $15A + 7 - 5B - 7B - 14A + 12$

**True or False**

22. Addition is commutative.

23. Division is associative.

24. Subtraction is associative.

25. Multiplication is commutative.