

Identifying Algebraic Properties Worksheet

Answer Key

Hey, Don't I Know You?

Choose which algebraic property (associative or commutative for addition or multiplication, or distributive) is used in each of the following statements.

1. $(-3 + 8) + 7 = -3 + (8 + 7)$
Associative property for addition

6. $-6 + 5(t + p) + 2 = -6 + 5t + 5p + 2$
Distributive property

2. $(-3 + 8) + 7 = (8 + -3) + 7$
Commutative property for addition

7. $6 + 2lw + 3 = 6 + 2l^2w + 3$
Commutative property for multiplication

3. $-a + b^2a + a = -a + ab^2 + a$
Commutative property for multiplication

8. $7 + (3x + 6)c = 7 + 3xc + 6c$
Distributive property

4. $x^2 - 4 = 0$
None. This is an equation, not a true statement.

9. $x^2 + y^2 - xx = y^2$
Commutative property of addition
($x^2 + y^2 - xx = x^2 - x^2 + y^2 = y^2$)

5. $-2(4(lw) + 3) = -2((4l)w + 3)$
Associative property for multiplication

10. $2x^2 + 6yx + 12x = (x + 3y + 6)(2x)$
Distributive property

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