

Introduction to Algebra

Basic Algebra Properties

Under each example, write the property it represents.

1) $3(4) = 4(3)$

2) $x + (8 + y) = (x + 8) + y$

3) $5(x + y) = 5(x) + 5(y)$

4) $6x + 0 = 6x$

5) $x + 7 = 7 + x$

6) $xyz = yxz$

7) $z(5 - y) = 5(z) - y(z)$

8) $2x + (3y + z) = (2x + 3y) + z$

9) $8x + (-8x) = 0$

Introduction to Algebra - Answers

Basic Algebra Properties

Under each example, write the property it represents.

1) $3(4) = 4(3)$

Commutative Property of Multiplication

2) $x + (8 + y) = (x + 8) + y$

Associative Property of Addition

3) $5(x + y) = 5(x) + 5(y)$

Distributive Property

4) $6x + 0 = 6x$

Identity Property of Addition

5) $x + 7 = 7 + x$

Commutative Property of Addition

6) $xyz = yxz$

Commutative Property of Multiplication

7) $z(5 - y) = 5(z) - y(z)$

Distributive Property

8) $2x + (3y + z) = (2x + 3y) + z$

Associative Property of Addition

9) $8x + (-8x) = 0$

Inverse Property of Addition