Chapter 6 Lesson 3:

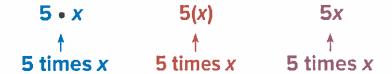
Variables and Expressions

Algebra: language of symbols including variables

Variables: is a symbol, usually a letter, used to represent a number.

Algebraic Expressions: contain at lease one variable and at least one operation. Example: n + 2

The letter x is often used as a variable. To avoid confusion with the symbol \times , there are other ways to show multiplication.



The variables in an expression can be replaced with any number. Once the variables have been replaced, you can evaluate, or find the value of, the algebraic expression.

Evaluate each expression if a = 6, b = 4, and $c = \frac{1}{3}$.

1.)
$$a+8$$

$$(a+8)$$

$$(a+8)$$

$$(b+8)$$

$$(a+8)$$

$$(a$$

Evaluate each expression if x = 3, y = 12, and z = 8.

1.)
$$4z+8-6$$
 2.) $y^{2} \div (3z)$ 3.) $7z \div 4+5x$ $4(8)+8-6$ $12^{2} \div (3\cdot 8)$ $7(8) \div 4+5(3)$ $32+8-6$ $12^{2} \div 24$ $5(6 \div 4+5(3))$ $40-6$ $144 \div 24$ $14+5(3)$ $14+15$ 29