

Grade 7  
Unit 2 Vocabulary

One-Variable Equations and  
Inequalities

7.10A, 7.10B, 7.10C, 7.11A, 7.11B

Expression – One or a group of terms and may include variables, constants, operators and grouping symbols.

Math problem without an equal sign.

$$(3 + 5) \times 7$$

*Equation* – a mathematical statement composed of algebraic and/or numeric expressions set equal to each other.


Math problem with an equal sign.

$x - 12 = 9$	$21 - x = 9$
$21 - 10x = 9$	$10x - 12 = 9$

Variable – A letter or symbol that represents a number.

A letter in a math problem.


$$1 + x = 3$$

  
**variable**

*Coefficient* – A number that is multiplied by a variable(s).

The number in front of the variable.

$$5x + 3$$

 **coefficient**

*Constant* – A fixed value that does not appear with a variable(s).

The number that is not with a variable.

$$5x + 7 = 12$$

↑                      ↑  
Constants

*Inequality* – A mathematical statement composed of algebraic and/or numeric expressions set apart by an inequality symbol.

A math problem with a  $<$ ,  $>$ ,  $\leq$ , or  $\geq$  symbol instead of  $=$ .

$$n + 5 > 10$$

$$n + 5 - 5 > 10 - 5$$

$$n > 5$$

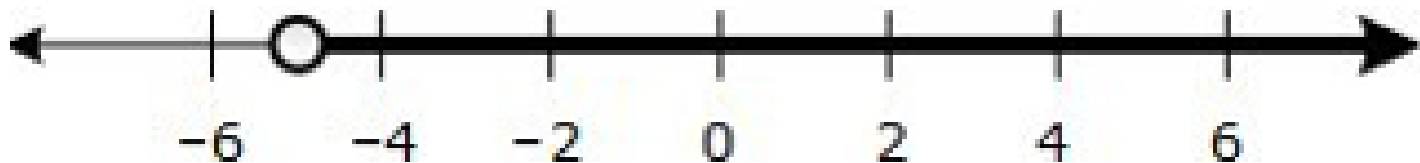
Solution: all numbers  
greater than 5

*Solution set* – A set of all values of the variable(s) that satisfy the equation or inequality.

List of ALL possible answers for a problem.

$$x > -5$$

$$x = \{-4, -3, -2, \dots\}$$





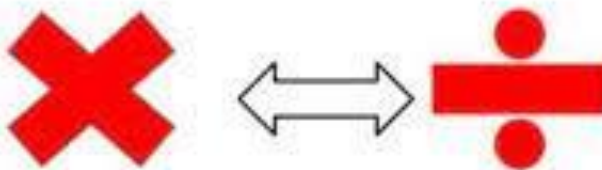
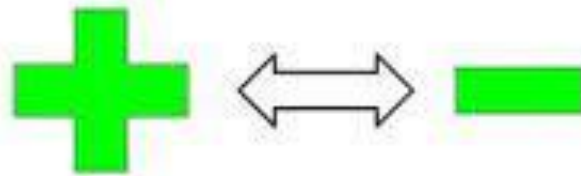
Order of Operations - The rules of which calculations are performed first when simplifying an expression.

Steps for solving multi-step problems.

ORDER OF OPERATIONS			
The order of operations tells you the sequence to follow when you are performing operations in a mathematical expression.			
<b>P</b>	<b>E</b>	<b>M D</b>	<b>A S</b>
1	2	3	4
Parentheses	Exponents	Multiply or Divide	Add or Subtract
( )	$a^2$	<b>X</b> or $\div$	<b>+</b> or <b>-</b>
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*Inverse Operations* - The operation that reverses the effect of another operation.

Opposite operations



**Term** - In Algebra a term is either a single number or variable, or numbers and variables multiplied together. Terms are separated by + or - signs, or sometimes by divide.

A number, variable, or combination of the two

