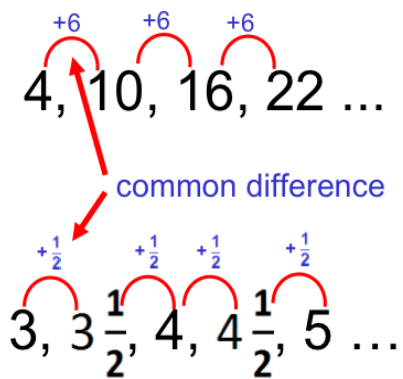
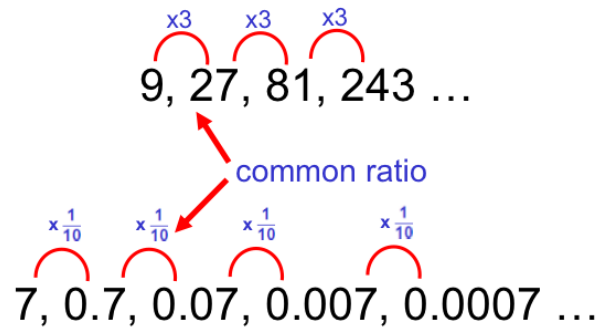


What is the next term?



What is the next term?



$$0.3 + 0 = 0.3$$

$$0 + (-7) = -7$$

$$\frac{4}{7} = 0 + \frac{4}{7}$$

$$w + 0 = w$$

$$1.4 + (-1.4) = 0$$

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

$$0 = \frac{4}{7} + \left(-\frac{4}{7}\right)$$

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

**Geometric  
Sequences**

**Arithmetic  
Sequences**

**Additive  
Inverse  
Property**

**Additive  
Identity  
Property**

Addition:

$$(4 + 2) + 8 = 4 + (2 + 8)$$

$$x + (3x + \frac{1}{2}) = (x + 3x) + \frac{1}{2}$$

Multiplication:

$$(3 \cdot 1.5) \cdot 6 = 3 \cdot (1.5 \cdot 6)$$

$$2(3x) = (2 \cdot 3)x$$

Addition:

$$2.76 + 3 = 3 + 2.76$$

$$(a + 5) + 7 = (5 + a) + 7$$

Multiplication:

$$-8 \cdot \frac{2}{3} = \frac{2}{3} \cdot (-8)$$

$$y \cdot 9 = 9y$$

$$9 \cdot 1 = 9$$

$$1 \cdot (-10) = -10$$

$$\frac{3}{2} = \frac{3}{2} \cdot 1$$

$$2 \cdot \frac{1}{2} = 1$$

$$1 = (-\frac{1}{9}) \cdot -9$$

$$x \cdot \frac{1}{x} = 1 \quad (x \neq 0)$$

**Commutative  
Property**

**Associative  
Property**

**Multiplicative  
Inverse  
Property**

**Multiplicative  
Identity  
Property**

$$0 = 8 \cdot 0$$

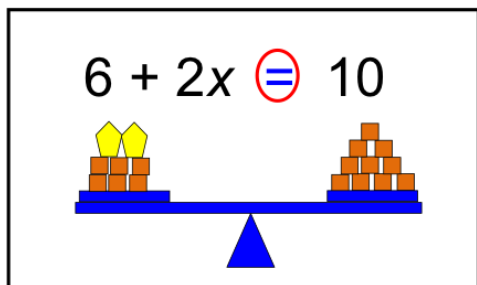
$$0(-13) = 0$$

$$\frac{5}{6}x \cdot 0 = 0$$

$$-4(\overset{\curvearrowright}{2} + \overset{\curvearrowright}{3}) = -4(\overset{\curvearrowright}{2}) + -4(\overset{\curvearrowright}{3})$$

$$5 \cdot (y - 7) = (5 \cdot y) - (5 \cdot 7)$$

$$(2 \cdot \frac{1}{3}) + (2 \cdot 5) = 2(\frac{1}{3} + 5)$$



A mathematical sentence stating that two expressions are equal.

$$2.76 + 3 \text{ (} = \text{)} 3 + 2.76$$

$$3x \text{ (} = \text{)} 6.9$$

$$x$$

$$-\sqrt{26}$$

$$2x + 3^4$$

$$3(y + 3.9) - \frac{8}{9}$$

**Distributive  
Property**

**Multiplicative  
Property of  
Zero**

**Expression**

**Equation**

$$2(y + 3)$$

$$3 + x = 2.08$$

$$A = \pi r^2$$

$$(-4) + 2x$$

$$-7y^2$$

$$\frac{2}{3}ab - \frac{1}{2}$$

$$\underbrace{3x}_{\text{3 terms}} + \underbrace{2y}_{\text{3 terms}} - \underbrace{8}_{\text{3 terms}}$$

$$\underbrace{-5x^2}_{\text{2 terms}} + \underbrace{(-2x)}_{\text{2 terms}}$$

$$\underbrace{\frac{2}{3}ab}_{\text{1 term}}$$

$$4x - 12 \rightarrow -12$$

$$7 - 2y + x - 6x^2$$

$$3(x + 3.9) + \frac{8}{9}$$

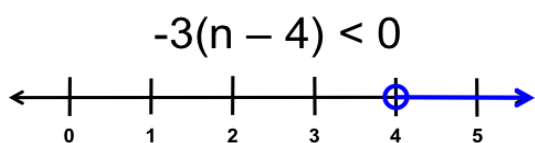
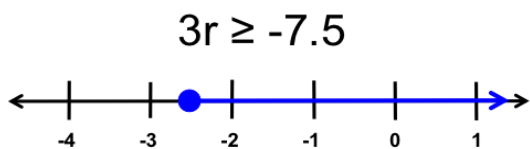
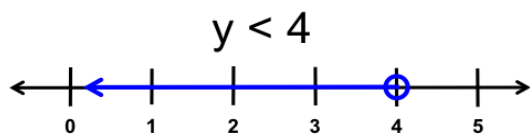
**Coefficient**

**Variable**

**Constant**

**Term**





$$(4x) - 3y + (6x) - 7$$

$$(2y^2) - 3y + (7y^2)$$

$$-5r^2(-6) + 2r + (2)$$

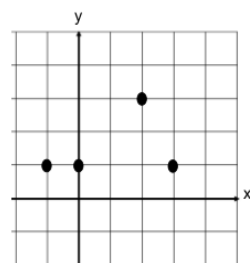
$$\{(2,3), (4,1), (2,5)\}$$

x	y
2	2
-3	4
5	-1
0	4
1	-6

$$\{(0,4), (0,3), (0,2), (0,1)\}$$

$$\{(2,4), (3,2), (0,2), (-1,2)\}$$

x	y
3	2
2	4
0	2
-1	2



**Like Terms**

**Inequality**

**Functions**

**Relations**

$x$	$y$
0	1
1	2
2	5
3	10
4	17

$a$	1	2	3	4
$b$	22,500	22,000	21,500	21,000

$\{(-2,0), (-1,1), (0,2), (1,3)\}$

$x$	$y$
-2	0
-1	1
0	2
1	3

$\{-2, -1, 0, 1\}$

$\{(-2,0), (-1,1), (0,2), (1,3)\}$

$x$	$y$
-2	0
-1	1
0	2
1	3

$\{0, 1, 2, 3\}$

Determine the **distance** a car will travel going 55 mph.

$$d = 55h$$

independent

$h$	$d$
0	0
1	55
2	110
3	165

dependent

**Domain**

**Table of  
Values**

**Dependent/  
Independent  
Variable**

**Range**

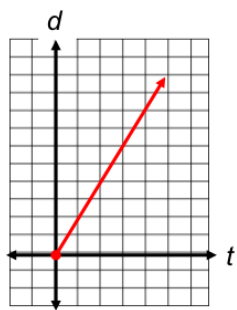
$$y = 2x + 7$$

$x$  represents the independent variable (input values or domain)

$$y = 2x + 7$$

$y$  represents the dependent variable (output values or range)

The total distance Sam walks depends on how long he walks. If he walks at 2.1 mph, show multiple representations of the relationship.



$t$	$d$
0	0
1	2.1
2	4.2
4	8.4

$$d = 2.1t$$

$$2x - 5.7 = -3.4x + 11.04$$

$$\frac{2}{3}(n + 9) = -\frac{5}{6}n$$

$$25 = \frac{6p - 5}{-4}$$

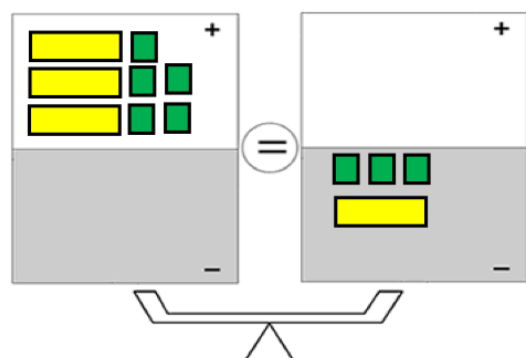
**Dependent  
Variable**

**Independent  
Variable**

**Multi-step  
Equations**

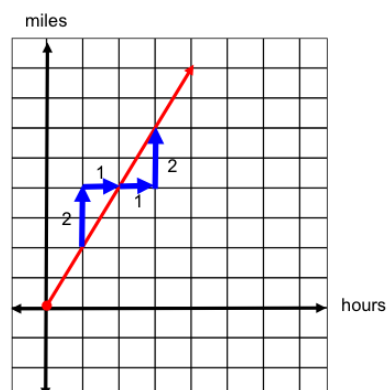
**Connecting  
Representations**

$$3x + 5 = -3 - x$$



A student walks 2 miles per hour

$\frac{2 \text{ miles}}{1 \text{ hour}}$



**Unit Rate as  
Slope**

**Multistep  
Equation**