

What is the next term?

$$4, 10, 16, 22 \dots$$

$$3, 3\frac{1}{2}, 4, 4\frac{1}{2}, 5 \dots$$

What is the next term?

$$9, 27, 81, 243 \dots$$

$$7, 0.7, 0.07, 0.007, 0.0007 \dots$$

$$0.3 + 0 = 0.3$$

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

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

$$w + 0 = w$$

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

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

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

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

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:

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

$$y \cdot 9 = 9y$$

$$9 \cdot 1 = 9$$

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

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

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

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

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

$$0 = 8 \cdot 0$$

$$0(-13) = 0$$

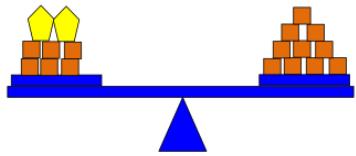
$$\frac{5}{6}x \cdot 0 = 0$$

$$-4(2 + 3) = -4(2) + -4(3)$$

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

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

$$6 + 2x \stackrel{?}{=} 10$$



A mathematical sentence stating that two expressions are equal.

$$2.76 + 3 \stackrel{?}{=} 3 + 2.76$$

$$3x \stackrel{?}{=} 6.9$$

$$x$$

$$-\sqrt{26}$$

$$2x + 3^4$$

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

$$2(y + 3)$$

$$3 + x = 2.08$$

$$A = \pi r^2$$

$$(-4) + 2x$$

$$-7y^2$$

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

$$\underbrace{3x}_{\text{1 term}} + \underbrace{2y}_{\text{1 term}} - \underbrace{8}_{\text{1 term}}$$

3 terms

$$\underbrace{-5x^2}_{\text{1 term}} + \underbrace{(-2x)}_{\text{1 term}}$$

2 terms

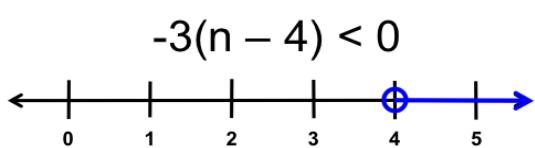
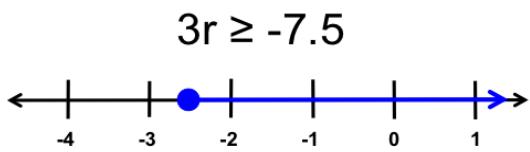
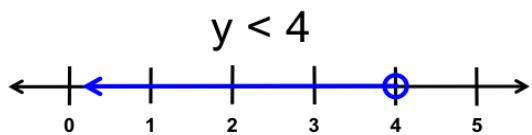
$$\underbrace{\frac{2}{3}ab}_{\text{1 term}}$$

1 term

$$4x - \underbrace{12}_{\text{1 term}}$$

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

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



$$\textcircled{4x} - 3y + \textcircled{6x} - 7$$

$$\textcircled{2y^2} - 3y + \textcircled{7y^2}$$

$$-5r^2 \textcircled{-6} + 2r + \textcircled{2}$$

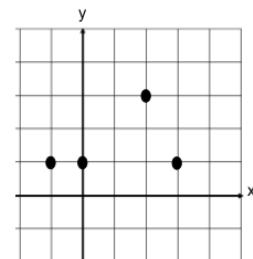
$$\{(2,3), (4,1), (2,5)\}$$

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



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

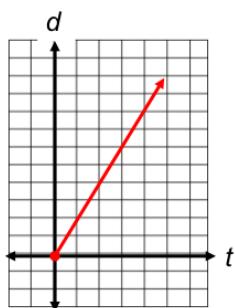
$$y = 2\textcolor{blue}{x} + 7$$

$\textcolor{blue}{x}$ represents the independent variable (input values or domain)

$$\textcolor{blue}{y} = 2x + 7$$

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

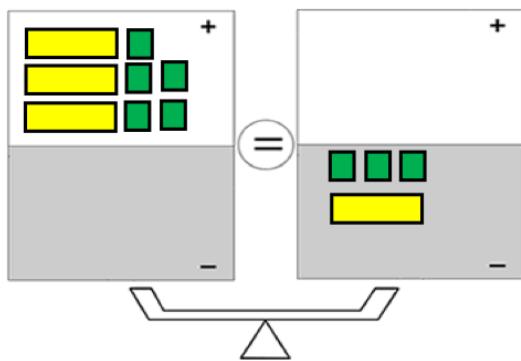
$$d = 2.1t$$

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

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

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

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



A student walks 2 miles per hour

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

