

# Solutions to Equations Practice

1. Is the point (2, 10) a solution to the equation  $2x - y = 14$ ?

No

$$\begin{array}{cc} 2 & 10 \\ \downarrow & \downarrow \\ 4 - 10 & = -6 \end{array}$$

2. Is the point (5, 4) a solution to the equation  $2x + 3y = 22$ ?

Yes

$$\begin{array}{cc} \uparrow & \uparrow \\ 10 & + 12 = 22 \\ 5 & 4 \end{array}$$

3. Using the equation  $x + 3y = 9$ , find the missing variable for the following ordered pairs that make the equation true.

$$3 + 3y = 9$$

$$3 + 3(2)$$

$$\begin{array}{r} 3 + 6 \\ 9 \end{array}$$

a. (3, 2)

$$x + 3y = 9$$

$$3 + 6 = 9$$

b. (-6, 5)

$$\begin{array}{l} x + 3(5) = 9 \\ x + 15 = 9 \\ -6 + 15 = 9 \end{array}$$

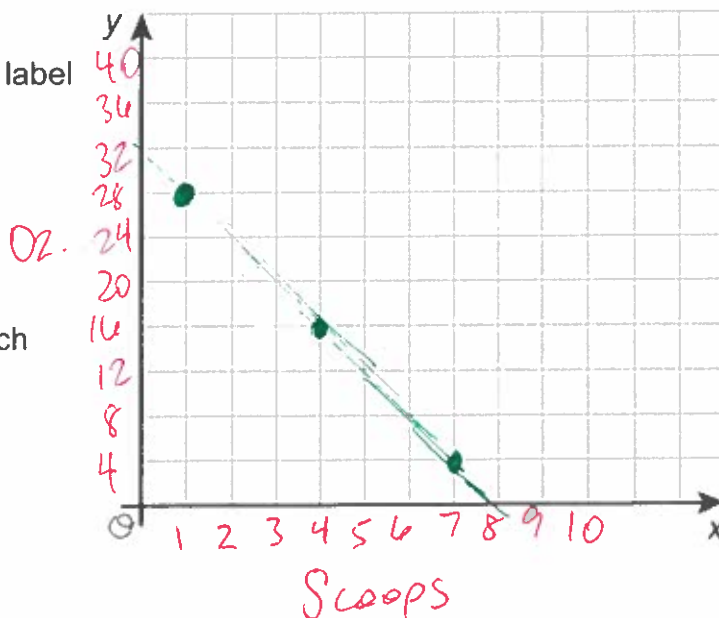
4. A store sells ice cream with assorted toppings. They charge \$2.00 for each scoop of ice cream, plus 50 cents per ounce of toppings. You have \$16 to spend on a glorious ice cream creation.

a. Complete the table showing different ways you can spend your \$16.

Scoops of ice cream (x)	Ounces of toppings (y)
1	28
7	4
4	16

$\$2 = \$14 = \$16$   
 $\$14 = \$2 = \$16$   
 $\$8 = \$8 = \$16$

b. Graph your points on the following graph. Be sure to label your x-axis and y-axis appropriately.



c. Create an equation to match this situation.

$$2x + 0.50y = 16$$