

Identifying Point of Intersection with Equations

Name: _____

For each system of equations determine the point of intersection in a graph.

Answers

1)
$$\begin{cases} y = 1.25x + 2 \\ y = 0.5x - 1 \end{cases}$$

2)
$$\begin{cases} y = 0.8x - 5 \\ y = 0.9x - 6 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3)
$$\begin{cases} y = -4.25x + 7 \\ y = -3.25x + 3 \end{cases}$$

4)
$$\begin{cases} y = -0.5x - 4 \\ y = 2.75x + 9 \end{cases}$$

5)
$$\begin{cases} y = -2.75x + 2 \\ y = -4.25x + 8 \end{cases}$$

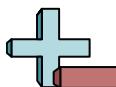
6)
$$\begin{cases} y = 1.5x - 6 \\ y = 1.25x - 4 \end{cases}$$

7)
$$\begin{cases} y = -0.25x + 9 \\ y = 3.75x - 7 \end{cases}$$

8)
$$\begin{cases} y = 1.25x - 6 \\ y = -1.75x + 6 \end{cases}$$

9)
$$\begin{cases} y = -1.5x + 8 \\ y = 0.25x + 1 \end{cases}$$

10)
$$\begin{cases} y = -0.5x - 5 \\ y = 0.5x + 3 \end{cases}$$



Identifying Point of Intersection with Equations

Name: **Answer Key**

For each system of equations determine the point of intersection in a graph.

Answers

1)
$$\begin{cases} y = 1.25x + 2 \\ y = 0.5x - 1 \end{cases}$$

$$1.25x + 2 = 0.5x - 1$$

$$0.75x = -3$$

$$1x = -4$$

$$y = (1.25 \times -4) + 2$$

$$y = (0.5 \times -4) - 1$$

2)
$$\begin{cases} y = 0.8x - 5 \\ y = 0.9x - 6 \end{cases}$$

$$0.8x - 5 = 0.9x - 6$$

$$-0.1x = -1$$

$$1x = 10$$

$$y = (0.8 \times 10) - 5$$

$$y = (0.9 \times 10) - 6$$

3)
$$\begin{cases} y = -4.25x + 7 \\ y = -3.25x + 3 \end{cases}$$

$$-4.25x + 7 = -3.25x + 3$$

$$-1x = -4$$

$$1x = 4$$

$$y = (-4.25 \times 4) + 7$$

$$y = (-3.25 \times 4) + 3$$

4)
$$\begin{cases} y = -0.5x - 4 \\ y = 2.75x + 9 \end{cases}$$

$$-0.5x - 4 = 2.75x + 9$$

$$-3.25x = 13$$

$$1x = -4$$

$$y = (-0.5 \times -4) - 4$$

$$y = (2.75 \times -4) + 9$$

5)
$$\begin{cases} y = -2.75x + 2 \\ y = -4.25x + 8 \end{cases}$$

$$-2.75x + 2 = -4.25x + 8$$

$$1.5x = 6$$

$$1x = 4$$

$$y = (-2.75 \times 4) + 2$$

$$y = (-4.25 \times 4) + 8$$

6)
$$\begin{cases} y = 1.5x - 6 \\ y = 1.25x - 4 \end{cases}$$

$$1.5x - 6 = 1.25x - 4$$

$$0.25x = 2$$

$$1x = 8$$

$$y = (1.5 \times 8) - 6$$

$$y = (1.25 \times 8) - 4$$

7)
$$\begin{cases} y = -0.25x + 9 \\ y = 3.75x - 7 \end{cases}$$

$$-0.25x + 9 = 3.75x - 7$$

$$-4x = -16$$

$$1x = 4$$

$$y = (-0.25 \times 4) + 9$$

$$y = (3.75 \times 4) - 7$$

8)
$$\begin{cases} y = 1.25x - 6 \\ y = -1.75x + 6 \end{cases}$$

$$1.25x - 6 = -1.75x + 6$$

$$3x = 12$$

$$1x = 4$$

$$y = (1.25 \times 4) - 6$$

$$y = (-1.75 \times 4) + 6$$

9)
$$\begin{cases} y = -1.5x + 8 \\ y = 0.25x + 1 \end{cases}$$

$$-1.5x + 8 = 0.25x + 1$$

$$-1.75x = -7$$

$$1x = 4$$

$$y = (-1.5 \times 4) + 8$$

$$y = (0.25 \times 4) + 1$$

10)
$$\begin{cases} y = -0.5x - 5 \\ y = 0.5x + 3 \end{cases}$$

$$-0.5x - 5 = 0.5x + 3$$

$$-1x = 8$$

$$1x = -8$$

$$y = (-0.5 \times -8) - 5$$

$$y = (0.5 \times -8) + 3$$

1. (-4, -3)2. (10, 3)3. (4, -10)4. (-4, -2)5. (4, -9)6. (8, 6)7. (4, 8)8. (4, -1)9. (4, 2)10. (-8, -1)