



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

Answers

1)
$$\begin{cases} y = -0.5x + 1 \\ y = -1.5x + 7 \end{cases}$$

2)
$$\begin{cases} y = 2.5x + 7 \\ y = 0.25x - 2 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = 0.5x - 9 \\ y = 0.1x - 5 \end{cases}$$

4)
$$\begin{cases} y = -1.2x - 1 \\ y = -0.4x + 3 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = 0.5x + 1 \\ y = 2.25x - 6 \end{cases}$$

6)
$$\begin{cases} y = 0.75x - 3 \\ y = 2.25x - 9 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = 0.8x + 4 \\ y = 0.9x + 5 \end{cases}$$

8)
$$\begin{cases} y = 2.75x - 9 \\ y = -0.5x + 4 \end{cases}$$

9)
$$\begin{cases} y = -0.75x - 7 \\ y = -0.25x - 5 \end{cases}$$

10)
$$\begin{cases} y = -1.5x + 8 \\ y = 6.5x - 8 \end{cases}$$



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

Answers

$$1) \begin{cases} y = -0.5x + 1 \\ y = -1.5x + 7 \end{cases}$$

$$-0.5x + 1 = -1.5x + 7$$

$$1x = 6$$

$$1x = 6$$

$$y = (-0.5 \times 6) + 1$$

$$y = (-1.5 \times 6) + 7$$

$$2) \begin{cases} y = 2.5x + 7 \\ y = 0.25x - 2 \end{cases}$$

$$2.5x + 7 = 0.25x - 2$$

$$2.25x = -9$$

$$1x = -4$$

$$y = (2.5 \times -4) + 7$$

$$y = (0.25 \times -4) - 2$$

$$3) \begin{cases} y = 0.5x - 9 \\ y = 0.1x - 5 \end{cases}$$

$$0.5x - 9 = 0.1x - 5$$

$$0.4x = 4$$

$$1x = 10$$

$$y = (0.5 \times 10) - 9$$

$$y = (0.1 \times 10) - 5$$

$$4) \begin{cases} y = -1.2x - 1 \\ y = -0.4x + 3 \end{cases}$$

$$-1.2x - 1 = -0.4x + 3$$

$$-0.8x = 4$$

$$1x = -5$$

$$y = (-1.2 \times -5) - 1$$

$$y = (-0.4 \times -5) + 3$$

$$5) \begin{cases} y = 0.5x + 1 \\ y = 2.25x - 6 \end{cases}$$

$$0.5x + 1 = 2.25x - 6$$

$$-1.75x = -7$$

$$1x = 4$$

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

$$y = (2.25 \times 4) - 6$$

$$6) \begin{cases} y = 0.75x - 3 \\ y = 2.25x - 9 \end{cases}$$

$$0.75x - 3 = 2.25x - 9$$

$$-1.5x = -6$$

$$1x = 4$$

$$y = (0.75 \times 4) - 3$$

$$y = (2.25 \times 4) - 9$$

$$7) \begin{cases} y = 0.8x + 4 \\ y = 0.9x + 5 \end{cases}$$

$$0.8x + 4 = 0.9x + 5$$

$$-0.1x = 1$$

$$1x = -10$$

$$y = (0.8 \times -10) + 4$$

$$y = (0.9 \times -10) + 5$$

$$8) \begin{cases} y = 2.75x - 9 \\ y = -0.5x + 4 \end{cases}$$

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

$$3.25x = 13$$

$$1x = 4$$

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

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

$$9) \begin{cases} y = -0.75x - 7 \\ y = -0.25x - 5 \end{cases}$$

$$-0.75x - 7 = -0.25x - 5$$

$$-0.5x = 2$$

$$1x = -4$$

$$y = (-0.75 \times -4) - 7$$

$$y = (-0.25 \times -4) - 5$$

$$10) \begin{cases} y = -1.5x + 8 \\ y = 6.5x - 8 \end{cases}$$

$$-1.5x + 8 = 6.5x - 8$$

$$-8x = -16$$

$$1x = 2$$

$$y = (-1.5 \times 2) + 8$$

$$y = (6.5 \times 2) - 8$$

1. (6, -2)2. (-4, -3)3. (10, -4)4. (-5, 5)5. (4, 3)6. (4, 0)7. (-10, -4)8. (4, 2)9. (-4, -4)10. (2, 5)