



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

Answers

1)
$$\begin{cases} y = 1.5x + 2 \\ y = 5.5x - 6 \end{cases}$$

2)
$$\begin{cases} y = 0.7x - 2 \\ y = 0.6x - 3 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -0.5x - 4 \\ y = -0.6x - 3 \end{cases}$$

4)
$$\begin{cases} y = -4.5x - 9 \\ y = -3.25x - 4 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -0.5x - 5 \\ y = 0.9x + 9 \end{cases}$$

6)
$$\begin{cases} y = 0.1x - 1 \\ y = -0.5x + 5 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = 0.1x + 9 \\ y = -0.2x + 6 \end{cases}$$

8)
$$\begin{cases} y = 0.5x - 5 \\ y = 0.75x - 7 \end{cases}$$

9)
$$\begin{cases} y = -0.5x + 2 \\ y = 2.25x - 9 \end{cases}$$

10)
$$\begin{cases} y = 4.25x - 9 \\ y = 3.25x - 5 \end{cases}$$



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

Answers

1) $\begin{cases} y = 1.5x + 2 \\ y = 5.5x - 6 \end{cases}$
 $1.5x + 2 = 5.5x - 6$
 $-4x = -8$
 $1x = 2$
 $y = (1.5 \times 2) + 2$
 $y = (5.5 \times 2) - 6$

2) $\begin{cases} y = 0.7x - 2 \\ y = 0.6x - 3 \end{cases}$
 $0.7x - 2 = 0.6x - 3$
 $0.1x = -1$
 $1x = -10$
 $y = (0.7 \times -10) - 2$
 $y = (0.6 \times -10) - 3$

3) $\begin{cases} y = -0.5x - 4 \\ y = -0.6x - 3 \end{cases}$
 $-0.5x - 4 = -0.6x - 3$
 $0.1x = 1$
 $1x = 10$
 $y = (-0.5 \times 10) - 4$
 $y = (-0.6 \times 10) - 3$

4) $\begin{cases} y = -4.5x - 9 \\ y = -3.25x - 4 \end{cases}$
 $-4.5x - 9 = -3.25x - 4$
 $-1.25x = 5$
 $1x = -4$
 $y = (-4.5 \times -4) - 9$
 $y = (-3.25 \times -4) - 4$

5) $\begin{cases} y = -0.5x - 5 \\ y = 0.9x + 9 \end{cases}$
 $-0.5x - 5 = 0.9x + 9$
 $-1.4x = 14$
 $1x = -10$
 $y = (-0.5 \times -10) - 5$
 $y = (0.9 \times -10) + 9$

6) $\begin{cases} y = 0.1x - 1 \\ y = -0.5x + 5 \end{cases}$
 $0.1x - 1 = -0.5x + 5$
 $0.6x = 6$
 $1x = 10$
 $y = (0.1 \times 10) - 1$
 $y = (-0.5 \times 10) + 5$

7) $\begin{cases} y = 0.1x + 9 \\ y = -0.2x + 6 \end{cases}$
 $0.1x + 9 = -0.2x + 6$
 $0.3x = -3$
 $1x = -10$
 $y = (0.1 \times -10) + 9$
 $y = (-0.2 \times -10) + 6$

8) $\begin{cases} y = 0.5x - 5 \\ y = 0.75x - 7 \end{cases}$
 $0.5x - 5 = 0.75x - 7$
 $-0.25x = -2$
 $1x = 8$
 $y = (0.5 \times 8) - 5$
 $y = (0.75 \times 8) - 7$

9) $\begin{cases} y = -0.5x + 2 \\ y = 2.25x - 9 \end{cases}$
 $-0.5x + 2 = 2.25x - 9$
 $-2.75x = -11$
 $1x = 4$
 $y = (-0.5 \times 4) + 2$
 $y = (2.25 \times 4) - 9$

10) $\begin{cases} y = 4.25x - 9 \\ y = 3.25x - 5 \end{cases}$
 $4.25x - 9 = 3.25x - 5$
 $1x = 4$
 $1x = 4$
 $y = (4.25 \times 4) - 9$
 $y = (3.25 \times 4) - 5$

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