



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

Answers

1)
$$\begin{cases} y = -0.1x - 3 \\ y = 0.6x + 4 \end{cases}$$

2)
$$\begin{cases} y = -0.1x - 9 \\ y = 0.1x - 7 \end{cases}$$

1. _____

2. _____

3. _____

4. _____

3)
$$\begin{cases} y = -4.25x + 9 \\ y = -0.75x - 5 \end{cases}$$

4)
$$\begin{cases} y = -1.5x + 8 \\ y = -0.25x - 2 \end{cases}$$

5. _____

6. _____

7. _____

8. _____

5)
$$\begin{cases} y = -2.5x - 8 \\ y = -1.5x - 6 \end{cases}$$

6)
$$\begin{cases} y = -2.25x - 5 \\ y = -2.5x - 6 \end{cases}$$

9. _____

10. _____

7)
$$\begin{cases} y = -2.25x - 5 \\ y = -2.75x - 7 \end{cases}$$

8)
$$\begin{cases} y = -2.5x - 5 \\ y = -9.5x + 9 \end{cases}$$

9)
$$\begin{cases} y = 0.7x - 2 \\ y = -0.4x + 9 \end{cases}$$

10)
$$\begin{cases} y = -0.1x + 4 \\ y = 0.8x - 5 \end{cases}$$



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

Answers

1) $\begin{cases} y = -0.1x - 3 \\ y = 0.6x + 4 \end{cases}$
 $-0.1x - 3 = 0.6x + 4$
 $-0.7x = 7$
 $1x = -10$
 $y = (-0.1 \times -10) - 3$
 $y = (0.6 \times -10) + 4$

2) $\begin{cases} y = -0.1x - 9 \\ y = 0.1x - 7 \end{cases}$
 $-0.1x - 9 = 0.1x - 7$
 $-0.2x = 2$
 $1x = -10$
 $y = (-0.1 \times -10) - 9$
 $y = (0.1 \times -10) - 7$

3) $\begin{cases} y = -4.25x + 9 \\ y = -0.75x - 5 \end{cases}$
 $-4.25x + 9 = -0.75x - 5$
 $-3.5x = -14$
 $1x = 4$
 $y = (-4.25 \times 4) + 9$
 $y = (-0.75 \times 4) - 5$

4) $\begin{cases} y = -1.5x + 8 \\ y = -0.25x - 2 \end{cases}$
 $-1.5x + 8 = -0.25x - 2$
 $-1.25x = -10$
 $1x = 8$
 $y = (-1.5 \times 8) + 8$
 $y = (-0.25 \times 8) - 2$

5) $\begin{cases} y = -2.5x - 8 \\ y = -1.5x - 6 \end{cases}$
 $-2.5x - 8 = -1.5x - 6$
 $-1x = 2$
 $1x = -2$
 $y = (-2.5 \times -2) - 8$
 $y = (-1.5 \times -2) - 6$

6) $\begin{cases} y = -2.25x - 5 \\ y = -2.5x - 6 \end{cases}$
 $-2.25x - 5 = -2.5x - 6$
 $0.25x = -1$
 $1x = -4$
 $y = (-2.25 \times -4) - 5$
 $y = (-2.5 \times -4) - 6$

7) $\begin{cases} y = -2.25x - 5 \\ y = -2.75x - 7 \end{cases}$
 $-2.25x - 5 = -2.75x - 7$
 $0.5x = -2$
 $1x = -4$
 $y = (-2.25 \times -4) - 5$
 $y = (-2.75 \times -4) - 7$

8) $\begin{cases} y = -2.5x - 5 \\ y = -9.5x + 9 \end{cases}$
 $-2.5x - 5 = -9.5x + 9$
 $7x = 14$
 $1x = 2$
 $y = (-2.5 \times 2) - 5$
 $y = (-9.5 \times 2) + 9$

9) $\begin{cases} y = 0.7x - 2 \\ y = -0.4x + 9 \end{cases}$
 $0.7x - 2 = -0.4x + 9$
 $1.1x = 11$
 $1x = 10$
 $y = (0.7 \times 10) - 2$
 $y = (-0.4 \times 10) + 9$

10) $\begin{cases} y = -0.1x + 4 \\ y = 0.8x - 5 \end{cases}$
 $-0.1x + 4 = 0.8x - 5$
 $-0.9x = -9$
 $1x = 10$
 $y = (-0.1 \times 10) + 4$
 $y = (0.8 \times 10) - 5$

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