



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

Answers

1)
$$\begin{cases} y = 0.2x - 4 \\ y = -0.2x - 8 \end{cases}$$

2)
$$\begin{cases} y = 3.5x + 0 \\ y = 4.5x - 2 \end{cases}$$

3)
$$\begin{cases} y = -1.5x - 3 \\ y = -2.75x - 8 \end{cases}$$

4)
$$\begin{cases} y = -1.25x - 2 \\ y = -2.5x + 3 \end{cases}$$

5)
$$\begin{cases} y = -0.25x - 3 \\ y = 0.75x - 7 \end{cases}$$

6)
$$\begin{cases} y = 0.25x + 4 \\ y = 0.5x + 2 \end{cases}$$

7)
$$\begin{cases} y = 0.5x + 5 \\ y = 0.1x + 1 \end{cases}$$

8)
$$\begin{cases} y = 0.2x + 3 \\ y = 0.6x + 7 \end{cases}$$

9)
$$\begin{cases} y = -2.25x - 9 \\ y = -1.5x - 3 \end{cases}$$

10)
$$\begin{cases} y = 0.3x - 3 \\ y = -0.3x - 9 \end{cases}$$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____



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

Answers

1) $\begin{cases} y = 0.2x - 4 \\ y = -0.2x - 8 \end{cases}$
 $0.2x - 4 = -0.2x - 8$
 $0.4x = -4$
 $1x = -10$
 $y = (0.2 \times -10) - 4$
 $y = (-0.2 \times -10) - 8$

2) $\begin{cases} y = 3.5x + 0 \\ y = 4.5x - 2 \end{cases}$
 $3.5x + 0 = 4.5x - 2$
 $-1x = -2$
 $1x = 2$
 $y = (3.5 \times 2) + 0$
 $y = (4.5 \times 2) - 2$

3) $\begin{cases} y = -1.5x - 3 \\ y = -2.75x - 8 \end{cases}$
 $-1.5x - 3 = -2.75x - 8$
 $1.25x = -5$
 $1x = -4$
 $y = (-1.5 \times -4) - 3$
 $y = (-2.75 \times -4) - 8$

4) $\begin{cases} y = -1.25x - 2 \\ y = -2.5x + 3 \end{cases}$
 $-1.25x - 2 = -2.5x + 3$
 $1.25x = 5$
 $1x = 4$
 $y = (-1.25 \times 4) - 2$
 $y = (-2.5 \times 4) + 3$

5) $\begin{cases} y = -0.25x - 3 \\ y = 0.75x - 7 \end{cases}$
 $-0.25x - 3 = 0.75x - 7$
 $-1x = -4$
 $1x = 4$
 $y = (-0.25 \times 4) - 3$
 $y = (0.75 \times 4) - 7$

6) $\begin{cases} y = 0.25x + 4 \\ y = 0.5x + 2 \end{cases}$
 $0.25x + 4 = 0.5x + 2$
 $-0.25x = -2$
 $1x = 8$
 $y = (0.25 \times 8) + 4$
 $y = (0.5 \times 8) + 2$

7) $\begin{cases} y = 0.5x + 5 \\ y = 0.1x + 1 \end{cases}$
 $0.5x + 5 = 0.1x + 1$
 $0.4x = -4$
 $1x = -10$
 $y = (0.5 \times -10) + 5$
 $y = (0.1 \times -10) + 1$

8) $\begin{cases} y = 0.2x + 3 \\ y = 0.6x + 7 \end{cases}$
 $0.2x + 3 = 0.6x + 7$
 $-0.4x = 4$
 $1x = -10$
 $y = (0.2 \times -10) + 3$
 $y = (0.6 \times -10) + 7$

9) $\begin{cases} y = -2.25x - 9 \\ y = -1.5x - 3 \end{cases}$
 $-2.25x - 9 = -1.5x - 3$
 $-0.75x = 6$
 $1x = -8$
 $y = (-2.25 \times -8) - 9$
 $y = (-1.5 \times -8) - 3$

10) $\begin{cases} y = 0.3x - 3 \\ y = -0.3x - 9 \end{cases}$
 $0.3x - 3 = -0.3x - 9$
 $0.6x = -6$
 $1x = -10$
 $y = (0.3 \times -10) - 3$
 $y = (-0.3 \times -10) - 9$

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