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

1) $\begin{cases} y = -1.3x - 3 \\ y = -0.4x + 6 \end{cases}$

2) $\begin{cases} y = 1.75x + 1 \\ y = 3.25x - 5 \end{cases}$

3) $\begin{cases} y = -1.5x + 4 \\ y = -1.75x + 5 \end{cases}$

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

5) $\begin{cases} y = -0.25x + 8 \\ y = -2.25x + 0 \end{cases}$

6) $\begin{cases} y = 0.25x + 7 \\ y = -0.5x + 4 \end{cases}$

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

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

9) $\begin{cases} y = 0.25x + 2 \\ y = 0.5x + 1 \end{cases}$

10) $\begin{cases} y = -2.5x + 0 \\ y = -0.5x + 8 \end{cases}$

Answers

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

1-10	90	80	70	60	50	40	30	20	10	0

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

1) $\begin{cases} y = -1.3x - 3 \\ y = -0.4x + 6 \end{cases}$

$-1.3x - 3 = -0.4x + 6$
$-0.9x = 9$
$1x = -10$
$y = (-1.3 \times -10) - 3$
$y = (-0.4 \times -10) + 6$

2) $\begin{cases} y = 1.75x + 1 \\ y = 3.25x - 5 \end{cases}$

$1.75x + 1 = 3.25x - 5$
$-1.5x = -6$
$1x = 4$
$y = (1.75 \times 4) + 1$
$y = (3.25 \times 4) - 5$

3) $\begin{cases} y = -1.5x + 4 \\ y = -1.75x + 5 \end{cases}$

$-1.5x + 4 = -1.75x + 5$
$0.25x = 1$
$1x = 4$
$y = (-1.5 \times 4) + 4$
$y = (-1.75 \times 4) + 5$

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

$1.25x + 2 = 0.5x - 1$
$0.75x = -3$
$1x = -4$
$y = (1.25 \times -4) + 2$
$y = (0.5 \times -4) - 1$

5) $\begin{cases} y = -0.25x + 8 \\ y = -2.25x + 0 \end{cases}$

$-0.25x + 8 = -2.25x + 0$
$2x = -8$
$1x = -4$
$y = (-0.25 \times -4) + 8$
$y = (-2.25 \times -4) + 0$

6) $\begin{cases} y = 0.25x + 7 \\ y = -0.5x + 4 \end{cases}$

$0.25x + 7 = -0.5x + 4$
$0.75x = -3$
$1x = -4$
$y = (0.25 \times -4) + 7$
$y = (-0.5 \times -4) + 4$

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

$-0.25x - 5 = -0.75x - 9$
$0.5x = -4$
$1x = -8$
$y = (-0.25 \times -8) - 5$
$y = (-0.75 \times -8) - 9$

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

$0.7x - 3 = 0.6x - 2$
$0.1x = 1$
$1x = 10$
$y = (0.7 \times 10) - 3$
$y = (0.6 \times 10) - 2$

9) $\begin{cases} y = 0.25x + 2 \\ y = 0.5x + 1 \end{cases}$

$0.25x + 2 = 0.5x + 1$
$-0.25x = -1$
$1x = 4$
$y = (0.25 \times 4) + 2$
$y = (0.5 \times 4) + 1$

10) $\begin{cases} y = -2.5x + 0 \\ y = -0.5x + 8 \end{cases}$

$-2.5x + 0 = -0.5x + 8$
$-2x = 8$
$1x = -4$
$y = (-2.5 \times -4) + 0$
$y = (-0.5 \times -4) + 8$

Answers

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

1-10	90	80	70	60	50	40	30	20	10	0