Identifying Point of Intersection with Equations Name:

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

1) $\begin{cases} y = 2.5x - 4 \\ y = 2.25x - 3 \end{cases}$

2) $\begin{cases} y = 0.2x + 7 \\ y = 0.8x + 1 \end{cases}$

3) $\begin{cases} y = -0.5x + 8 \\ y = -2.25x + 1 \end{cases}$

4) $\begin{cases} y = -1.25x - 4 \\ y = 0.5x + 3 \end{cases}$

5) $\begin{cases} y = -0.3x - 8 \\ y = 0.3x - 2 \end{cases}$

6) $\begin{cases} y = 0.25x - 9 \\ y = 3.25x + 3 \end{cases}$

7) $\begin{cases} y = 1.8x - 9 \\ y = 0.4x - 2 \end{cases}$

8) $\begin{cases} y = -1.5x - 3 \\ y = -0.25x + 2 \end{cases}$

9) $\begin{cases} y = 0.4x + 3 \\ y = 0.2x + 4 \end{cases}$

10) $\begin{cases} y = -0.4x + 6 \\ y = 0.8x + 0 \end{cases}$

Answers

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

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

Identifying Point of Intersection with Equations Name: **Answer Key**

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

1) $\begin{cases} y = 2.5x - 4 \\ y = 2.25x - 3 \end{cases}$

2.5x+-4 = 2.25x+-3
0.25x = 1
1x = 4
y = (2.5×4)+-4
y = (2.25×4)+-3

2) $\begin{cases} y = 0.2x + 7 \\ y = 0.8x + 1 \end{cases}$

0.2x+7 = 0.8x+1
-0.6x = -6
1x = 10
y = (0.2×10)+7
y = (0.8×10)+1

3) $\begin{cases} y = -0.5x + 8 \\ y = -2.25x + 1 \end{cases}$

-0.5x+8 = -2.25x+1
1.75x = -7
1x = -4
y = (-0.5×-4)+8
y = (-2.25×-4)+1

4) $\begin{cases} y = -1.25x - 4 \\ y = 0.5x + 3 \end{cases}$

-1.25x+-4 = 0.5x+3
-1.75x = 7
1x = -4
y = (-1.25×-4)+-4
y = (0.5×-4)+3

5) $\begin{cases} y = -0.3x - 8 \\ y = 0.3x - 2 \end{cases}$

-0.3x+-8 = 0.3x+-2
-0.6x = 6
1x = -10
y = (-0.3×-10)+-8
y = (0.3×-10)+-2

6) $\begin{cases} y = 0.25x - 9 \\ y = 3.25x + 3 \end{cases}$

0.25x+-9 = 3.25x+3
-3x = 12
1x = -4
y = (0.25×-4)+-9
y = (3.25×-4)+3

7) $\begin{cases} y = 1.8x - 9 \\ y = 0.4x - 2 \end{cases}$

1.8x+-9 = 0.4x+-2
1.4x = 7
1x = 5
y = (1.8×5)+-9
y = (0.4×5)+-2

8) $\begin{cases} y = -1.5x - 3 \\ y = -0.25x + 2 \end{cases}$

-1.5x+-3 = -0.25x+2
-1.25x = 5
1x = -4
y = (-1.5×-4)+-3
y = (-0.25×-4)+2

9) $\begin{cases} y = 0.4x + 3 \\ y = 0.2x + 4 \end{cases}$

0.4x+3 = 0.2x+4
0.2x = 1
1x = 5
y = (0.4×5)+3
y = (0.2×5)+4

10) $\begin{cases} y = -0.4x + 6 \\ y = 0.8x + 0 \end{cases}$

-0.4x+6 = 0.8x+0
-1.2x = -6
1x = 5
y = (-0.4×5)+6
y = (0.8×5)+0

Answers

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