Identifying Point of Intersection with Equations

Name:

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

1) $\begin{cases} y = -1.75x - 3 \\ y = -1.5x - 2 \end{cases}$

2) $\begin{cases} y = -0.2x - 8 \\ y = 0.2x - 6 \end{cases}$

3) $\begin{cases} y = -0.3x - 1 \\ y = -0.5x + 1 \end{cases}$

4) $\begin{cases} y = 2.25x - 3 \\ y = 3.75x - 9 \end{cases}$

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

6) $\begin{cases} y = -0.1x + 2 \\ y = 0.3x - 2 \end{cases}$

7) $\begin{cases} y = -3.25x - 4 \\ y = -3.5x - 5 \end{cases}$

8) $\begin{cases} y = -0.25x - 1 \\ y = -0.75x - 3 \end{cases}$

9) $\begin{cases} y = 0.5x - 6 \\ y = -0.2x + 1 \end{cases}$

10) $\begin{cases} y = -0.75x - 1 \\ y = -1.25x + 3 \end{cases}$

Answers

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

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

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

1) $\begin{cases} y = -1.75x - 3 \\ y = -1.5x - 2 \end{cases}$

-1.75x+-3 = -1.5x+-2
-0.25x = 1
1x = -4
y = (-1.75×-4)+-3
y = (-1.5×-4)+-2

2) $\begin{cases} y = -0.2x - 8 \\ y = 0.2x - 6 \end{cases}$

-0.2x+-8 = 0.2x+-6
-0.4x = 2
1x = -5
y = (-0.2×-5)+-8
y = (0.2×-5)+-6

3) $\begin{cases} y = -0.3x - 1 \\ y = -0.5x + 1 \end{cases}$

-0.3x+-1 = -0.5x+1
0.2x = 2
1x = 10
y = (-0.3×10)+-1
y = (-0.5×10)+1

4) $\begin{cases} y = 2.25x - 3 \\ y = 3.75x - 9 \end{cases}$

2.25x+-3 = 3.75x+-9
-1.5x = -6
1x = 4
y = (2.25×4)+-3
y = (3.75×4)+-9

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

-0.1x+6 = 0.6x+-1
-0.7x = -7
1x = 10
y = (-0.1×10)+6
y = (0.6×10)+-1

6) $\begin{cases} y = -0.1x + 2 \\ y = 0.3x - 2 \end{cases}$

-0.1x+2 = 0.3x+-2
-0.4x = -4
1x = 10
y = (-0.1×10)+2
y = (0.3×10)+-2

7) $\begin{cases} y = -3.25x - 4 \\ y = -3.5x - 5 \end{cases}$

-3.25x+-4 = -3.5x+-5
0.25x = -1
1x = -4
y = (-3.25×-4)+-4
y = (-3.5×-4)+-5

8) $\begin{cases} y = -0.25x - 1 \\ y = -0.75x - 3 \end{cases}$

-0.25x+-1 = -0.75x+-3
0.5x = -2
1x = -4
y = (-0.25×-4)+-1
y = (-0.75×-4)+-3

9) $\begin{cases} y = 0.5x - 6 \\ y = -0.2x + 1 \end{cases}$

0.5x+-6 = -0.2x+1
0.7x = 7
1x = 10
y = (0.5×10)+-6
y = (-0.2×10)+1

10) $\begin{cases} y = -0.75x - 1 \\ y = -1.25x + 3 \end{cases}$

-0.75x+-1 = -1.25x+3
0.5x = 4
1x = 8
y = (-0.75×8)+-1
y = (-1.25×8)+3

Answers

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