Identifizieren von Schnittpunkten mit Gleichungen Name:

Bestimmen Sie für jedes Gleichungssystem den Schnittpunkt in einem Graphen.

1) $\begin{cases} y = 0.1x + 7 \\ y = -0.2x + 4 \end{cases}$

2) $\begin{cases} y = 2.75x + 4 \\ y = -0.25x - 8 \end{cases}$

3) $\begin{cases} y = -0.2x + 8 \\ y = 1.5x - 9 \end{cases}$

4) $\begin{cases} y = -1.2x + 6 \\ y = -1.3x + 7 \end{cases}$

5) $\begin{cases} y = 1.5x - 8 \\ y = 1.25x - 6 \end{cases}$

6) $\begin{cases} y = -0.5x + 3 \\ y = -1.5x + 1 \end{cases}$

7) $\begin{cases} y = 0.6x + 4 \\ y = 1.8x - 2 \end{cases}$

8) $\begin{cases} y = 1.5x - 2 \\ y = 0.5x + 2 \end{cases}$

9) $\begin{cases} y = -0.1x + 0 \\ y = 0.3x + 4 \end{cases}$

10) $\begin{cases} y = -0.5x - 7 \\ y = -1.5x - 1 \end{cases}$

Antworten

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

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

Identifizieren von Schnittpunkten mit Gleichungen Name: **Lösungsschlüssel**

Bestimmen Sie für jedes Gleichungssystem den Schnittpunkt in einem Graphen.

1) $\begin{cases} y = 0.1x + 7 \\ y = -0.2x + 4 \end{cases}$

$0.1x+7 = -0.2x+4$
$0.3x = -3$
$1x = -10$
$y = (0.1\times-10)+7$
$y = (-0.2\times-10)+4$

2) $\begin{cases} y = 2.75x + 4 \\ y = -0.25x - 8 \end{cases}$

$2.75x+4 = -0.25x- 8$
$3x = -12$
$1x = -4$
$y = (2.75\times-4)+4$
$y = (-0.25\times-4)- 8$

3) $\begin{cases} y = -0.2x + 8 \\ y = 1.5x - 9 \end{cases}$

$-0.2x+8 = 1.5x- 9$
$-1.7x = -17$
$1x = 10$
$y = (-0.2\times10)+8$
$y = (1.5\times10)- 9$

4) $\begin{cases} y = -1.2x + 6 \\ y = -1.3x + 7 \end{cases}$

$-1.2x+6 = -1.3x+7$
$0.1x = 1$
$1x = 10$
$y = (-1.2\times10)+6$
$y = (-1.3\times10)+7$

5) $\begin{cases} y = 1.5x - 8 \\ y = 1.25x - 6 \end{cases}$

$1.5x- 8 = 1.25x- 6$
$0.25x = 2$
$1x = 8$
$y = (1.5\times8)- 8$
$y = (1.25\times8)- 6$

6) $\begin{cases} y = -0.5x + 3 \\ y = -1.5x + 1 \end{cases}$

$-0.5x+3 = -1.5x+1$
$1x = -2$
$1x = -2$
$y = (-0.5\times-2)+3$
$y = (-1.5\times-2)+1$

7) $\begin{cases} y = 0.6x + 4 \\ y = 1.8x - 2 \end{cases}$

$0.6x+4 = 1.8x- 2$
$-1.2x = -6$
$1x = 5$
$y = (0.6\times5)+4$
$y = (1.8\times5)- 2$

8) $\begin{cases} y = 1.5x - 2 \\ y = 0.5x + 2 \end{cases}$

$1.5x- 2 = 0.5x+2$
$1x = 4$
$1x = 4$
$y = (1.5\times4)- 2$
$y = (0.5\times4)+2$

9) $\begin{cases} y = -0.1x + 0 \\ y = 0.3x + 4 \end{cases}$

$-0.1x+0 = 0.3x+4$
$-0.4x = 4$
$1x = -10$
$y = (-0.1\times-10)+0$
$y = (0.3\times-10)+4$

10) $\begin{cases} y = -0.5x - 7 \\ y = -1.5x - 1 \end{cases}$

$-0.5x- 7 = -1.5x- 1$
$1x = 6$
$1x = 6$
$y = (-0.5\times6)- 7$
$y = (-1.5\times6)- 1$

Antworten

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

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