

3 Berechnung des Schnittpunkts zweier linearer Funktionen

Bestimme algebraisch den Schnittpunkt der beiden linearen Funktionen. Bringe dazu den y-Term auf die linke Seite und wähle einen geeigneten Faktor.

Knicke zuerst den Zettel an der Linie um, ohne Dir die Lösungen anzuschauen. Löse alle Aufgaben und vergleiche erst dann Deine Ergebnisse.

$$\text{a) } \begin{array}{l} \left| \begin{array}{l} 2x + y = -21 \\ 6x - 27 = 7y \end{array} \right| \implies \left| \begin{array}{l} 7y = -14x - 147 \\ 7y = 6x - 27 \end{array} \right| \end{array} \quad P(-6 | -9)$$

$$\text{b) } \begin{array}{l} \left| \begin{array}{l} -6x + 5y = -84 \\ 2x - 7y = 60 \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(9 | -6)$$

$$\text{c) } \begin{array}{l} \left| \begin{array}{l} -8x + 48 = -5y \\ -10 = 6x + 2y \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(1 | -8)$$

$$\text{d) } \begin{array}{l} \left| \begin{array}{l} 2x + 7y = 45 \\ -7y + 30 = -1x \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(5 | 5)$$

$$\text{e) } \begin{array}{l} \left| \begin{array}{l} 9x - 4y = 97 \\ -4x + 4y = -52 \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(9 | -4)$$

$$\text{f) } \begin{array}{l} \left| \begin{array}{l} -4y - 38 = -6x \\ -8x = 3y - 9 \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(3 | -5)$$

$$\text{g) } \begin{array}{l} \left| \begin{array}{l} -3x = -7y + 21 \\ -4y - 39 = -9x \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(7 | 6)$$

$$\text{h) } \begin{array}{l} \left| \begin{array}{l} 9x = -7y - 24 \\ -2y + 6 = 9x \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(2 | -6)$$

$$\text{i) } \begin{array}{l} \left| \begin{array}{l} -15 = -3x - 2y \\ 9x = -2y + 33 \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(3 | 3)$$

$$\text{j) } \begin{array}{l} \left| \begin{array}{l} -6y = -2x + 38 \\ -4x - 52 = 4y \end{array} \right| \implies \left| \begin{array}{l} = \\ = \end{array} \right| \end{array} \quad P(-5 | -8)$$