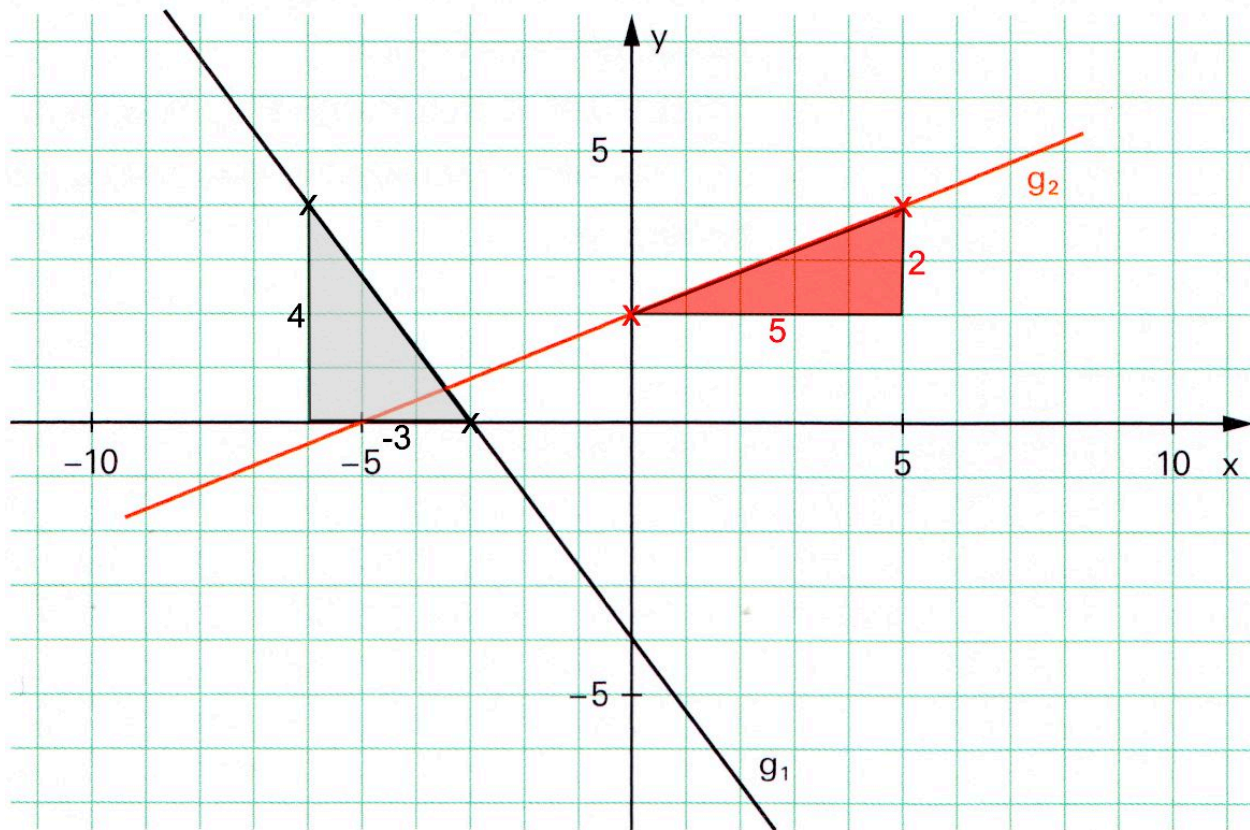


Lösung AH S.109 Nr.2



A $g_1 : y = -\frac{4}{3} \cdot x - 4$ $g_2 : y = \frac{2}{5} \cdot x + 2$

B

$$\begin{array}{rcll}
 g_1 : y & = & -\frac{4}{3} \cdot x - 4 & | \cdot 3 \\
 3 \cdot y & = & -4 \cdot x - 12 & | + 4 \cdot x \\
 4 \cdot x + 3 \cdot y & = & -12 & | + 12 \\
 \underline{4 \cdot x + 3 \cdot y + 12} & = & \underline{0} &
 \end{array}$$

$$\begin{array}{rcll}
 g_2 : y & = & \frac{2}{5} \cdot x + 2 & | \cdot 5 \\
 5 \cdot y & = & 2 \cdot x + 10 & | - 2 \cdot x \\
 -2 \cdot x + 5 \cdot y & = & 10 & | - 10 \\
 \underline{-2 \cdot x + 5 \cdot y - 10} & = & \underline{0} &
 \end{array}$$

oder: $\underline{\underline{0 = 2 \cdot x - 5 \cdot y + 10}}$

D

$$\begin{array}{rcll} -\frac{4}{3} \cdot x - 4 & = & \frac{2}{5} \cdot x + 2 & | \cdot 15 \\ -20 \cdot x - 60 & = & 6 \cdot x + 30 & | + 20 \cdot x \\ -60 & = & 26 \cdot x + 30 & | - 30 \\ -90 & = & 26 \cdot x & | : 26 \\ \hline -\frac{90}{26} = -\frac{45}{13} & = & x & \end{array}$$

$$\begin{aligned} y &= \frac{2}{5} \cdot x + 2 = \frac{2}{5^1} \cdot \left(-\frac{45^9}{13}\right) + 2 \\ &= -\frac{18}{13} + \frac{26}{13} = \underline{\underline{\frac{8}{13}}} \end{aligned}$$

Schnittpunkt : $\underline{\underline{S \left(-\frac{45}{13} / \frac{8}{13} \right)}}$