

1.

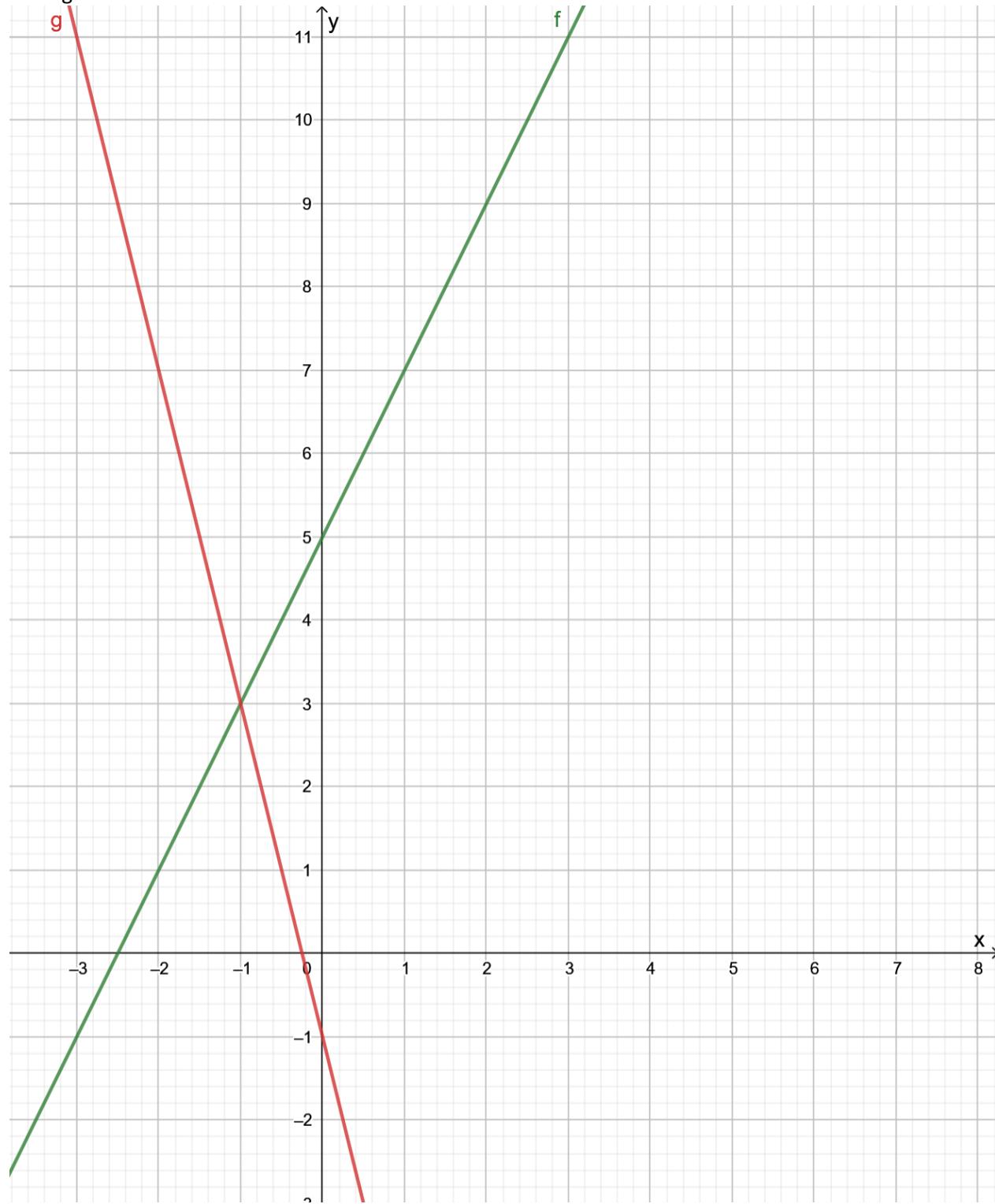
AH S. 13

2. Löse das Gleichungssystem rechnerisch und zeichnerisch!

$$\begin{array}{l|l} \left| \begin{array}{l} y - 5 = 2x \\ y + 4x = -1 \end{array} \right. & \left| \begin{array}{l} y = 2x + 5 \\ y = -4x - 1 \end{array} \right. \end{array} \quad \begin{array}{ll} 2x + 5 = -4x - 1 & /+4x \\ 6x + 5 = -1 & /-5 \\ 6x = -6 & /:6 \end{array}$$

$x = -1$       in  $y = 2x + 5$   
 $y = 2 * (-1) + 5$   
 $y = -2 + 5$   
 $y = 3$

in Diagramm



# Übung und Festigung

30 min

LB. S. 60 Nr. 4 e - h

**4.** Löse das Gleichungssystem. Verfahre zweckmäßig. Führe zuletzt die Probe durch.

a) 
$$\begin{cases} y = 2x + 2 \\ y = 3x - 2 \end{cases}$$

c) 
$$\begin{cases} x = y - 8 \\ x = 3y - 48 \end{cases}$$

e) 
$$\begin{cases} y + 3x = 18 \\ 2x + y = 11 \end{cases}$$

g) 
$$\begin{cases} 4x + y = 46 \\ y - x = 4 \end{cases}$$

b) 
$$\begin{cases} y - 2x = 5 \\ y = x + 10 \end{cases}$$

d) 
$$\begin{cases} y = x - 24 \\ 144 + y = 4x \end{cases}$$

f) 
$$\begin{cases} x + y = 16 \\ x = 2y + 10 \end{cases}$$

h) 
$$\begin{cases} x - 8y = 9 \\ 3y + x = 31 \end{cases}$$

e.)

$$\begin{array}{l|l|l|l} \begin{cases} y + 3x = 18 \\ 2x + y = 11 \end{cases} & \begin{array}{l} 18 - 3x = 11 - 2x \\ 18 - x = 11 \end{array} & \begin{array}{l} /+2x \\ /-18 /:(-1) \end{array} & L = \{(7 | -3)\} \\ \underline{x = 7} & \begin{array}{l} \text{in } y = 18 - 3x \\ y = 18 - 3*7 \end{array} & \underline{y = -3} & \\ \end{array}$$

f.)

$$\begin{array}{l|l|l|l} \begin{cases} x + y = 16 \\ x = 2y + 10 \end{cases} & \begin{array}{l} x = 16 - y \\ 16 - y = 2y + 10 \\ 16 = 3y + 10 \end{array} & \begin{array}{l} /+y \\ /-10 /:3 \end{array} & L = \{(14 | 2)\} \\ \underline{y = 2} & \begin{array}{l} \text{in } x = 2*2 + 10 \\ x = 4 + 10 \end{array} & \underline{x = 14} & \\ \end{array}$$

g.)

$$\begin{array}{l|l|l|l} \begin{cases} 4x + y = 46 \\ y - x = 4 \end{cases} & \begin{array}{l} y = 46 - 4x \\ y = 4 + x \end{array} & \begin{array}{l} 46 - 4x = 4 + x \\ 46 - 5x = 4 \\ -5x = -42 \end{array} & L = \{(8,4 | 12,4)\} \\ \underline{x = 8,4} & \begin{array}{l} \text{in } y = 4 + 8,4 \\ \underline{y = 12,4} \end{array} & \end{array}$$

h.)

$$\begin{array}{l|l|l|l} \begin{cases} x - 8y = 9 \\ 3y + x = 31 \end{cases} & \begin{array}{l} x = 9 + 8y \\ x = 31 - 3y \end{array} & \begin{array}{l} 9 + 8y = 31 - 3y \\ 9 + 11y = 31 \\ 11y = 22 \end{array} & L = \{(25 | 2)\} \\ \underline{y = 2} & \begin{array}{l} \text{in } x = 31 - 3y \\ x = 31 - 3*2 \\ x = 31 - 6 \\ \underline{x = 25} \end{array} & \end{array}$$