

1

$$\begin{array}{lcl} \text{a.)} & 3x - 4 = 5x + 6 & | -3x \\ & -4 = 2x + 6 & | -6 \\ & -10 = 2x & | :2 \\ & \underline{\underline{-5 = x}} & \end{array}$$

$$\begin{array}{lcl} \text{b.)} & x + 6 = 2 + 3x & | -x \\ & 6 = 2 + 2x & | -2 \\ & 4 = 2x & | :2 \\ & \underline{\underline{2 = x}} & \end{array}$$

$$\begin{array}{lcl} \text{c.)} & 2x - 4 = 8 - x & | +x \\ & 3x - 4 = 8 & | +4 \\ & 3x = 12 & | :3 \\ & \underline{\underline{x = 4}} & \end{array}$$

$$\begin{array}{lcl} \text{d.)} & -x - 2 = 3 + 4x & | +x \\ & -2 = 3 + 5x & | -3 \\ & -5 = 5x & | :5 \\ & \underline{\underline{-1 = x}} & \end{array}$$

$$\begin{array}{lcl} \text{e.)} & 5x - 4 = 3 - 2x & | +2x \\ & 7x - 4 = 3 & | +4 \\ & 7x = 7 & | :7 \\ & \underline{\underline{x = 1}} & \end{array}$$

$$\begin{array}{lcl}
 f.) & -4x + 4 = x & | + 4x \\
 & 4 = 5x & | : 5 \\
 & \underline{\underline{0,8 = x}} &
 \end{array}$$

$$\begin{array}{lcl}
 g.) & x + 9 = 9 - x & | + x \\
 & 2x + 9 = 9 & | - 9 \\
 & 2x = 0 & | : 2 \\
 & \underline{\underline{x = 0}} &
 \end{array}$$

$$\begin{array}{lcl}
 h.) & 6x - 9 = 9 - 6x & | + 6x \\
 & 12x - 9 = 9 & | + 9 \\
 & 12x = 18 & | : 12 \\
 & \underline{\underline{x = 1,5}} &
 \end{array}$$

$$\begin{array}{lcl}
 i.) & -x + 2 = 3 - 4x & | + 4x \\
 & 3x + 2 = 3 & | - 2 \\
 & 3x = 1 & | : 3 \\
 & \underline{\underline{x = \frac{1}{3}}} &
 \end{array}$$

$$\begin{array}{lcl}
 j.) & 2x - 3x = 4 - 5 & \\
 & -x = -1 & | + x \\
 & 0 = x - 1 & | + 1 \\
 & \underline{\underline{1 = x}} &
 \end{array}$$

2.

a.) $3x + 4 = 10 \quad | -4$

$$3x = 6 \quad | :3$$

$$x = 2$$

Zahl: 2.

b.) $2x - 7 = 9 \quad | +7$

$$2x = 16 \quad | :2$$

$$x = 8$$

Zahl: 8.

c.) $\frac{x}{3} + 4 = 10 \quad | \cdot 3$

$$x + 12 = 30 \quad | -12$$

$$x = 18$$

Zahl: 18.

d.) $x + x+2 + x+4 = 276$

$$3x + 6 = 276 \quad | -6$$

$$3x = 270 \quad | :3$$

$$x = 90$$

Zahlen: 90, 92, 94.

e.) 1. Zahl: $x-6$

$$x-6 + x + x+6 + x+14 = 70$$

2. Zahl: x

$$4x + 14 = 70 \quad | -14$$

3. Zahl: $x+6$

$$4x = 56 \quad | :4$$

4. Zahl: $x+14$

$$x = 14$$

Zahlen: 8, 14, 20, 28.

$$\begin{aligned}
 f.) \quad \frac{x}{3} + \frac{x}{4} &= 14 && | \cdot 12 \quad (\cdot 3 \cdot 4) \\
 4x + 3x &= 168 \\
 7x &= 168 && | : 7 \\
 \underline{x} &= \underline{24} \\
 \text{Zahl: } &\underline{\underline{24}}.
 \end{aligned}$$

$$\begin{aligned}
 g.) \quad \frac{x}{5} + 9 &= 2x && | \cdot 5 \\
 x + 45 &= 10x && | - x \\
 45 &= 9x && | : 9 \\
 \underline{5} &= \underline{x} \\
 \text{Zahl: } &\underline{\underline{5}}.
 \end{aligned}$$

$$\begin{aligned}
 h.) \quad (x+2) \cdot 4 &= 6 \\
 4x + 8 &= 6 && | - 8 \\
 4x &= -2 && | : 4 \\
 \underline{x} &= \underline{-0,5} \\
 \text{Zahl: } &\underline{\underline{-0,5}}.
 \end{aligned}$$
