

1 Löse die Gleichung.

$$\begin{array}{lcl} \text{a) } 3x - 2 = x + 10 & | -x & \\ 2x - 2 = 10 & | +2 & \\ \underline{2x} = \underline{12} & | :2 & \\ x = \underline{6} & & \end{array}$$

$$\begin{array}{lcl} \text{b) } 4x + 3 = x + 6 & | -x & \\ \underline{3x} + 3 = \underline{6} & | -3 & \\ \underline{3x} = \underline{3} & | :3 & \\ x = \underline{1} & & \end{array}$$

$$\begin{array}{lcl} \text{c) } 3x + 12 = x + 18 & | -x & \\ \underline{2x} + 12 = \underline{18} & | -12 & \\ \underline{2x} = \underline{6} & | :2 & \\ x = \underline{3} & & \end{array}$$

$$\begin{array}{lcl} \text{d) } 5x + 1 = 2x + 13 & | -2x & \\ \underline{3x} + 1 = \underline{13} & | -1 & \\ \underline{3x} = \underline{12} & | :3 & \\ x = \underline{4} & & \end{array}$$

$$\begin{array}{lcl} \text{e) } 6x + 2 = 2x + 10 & | -2x & \\ \underline{4x} + 2 = \underline{10} & | -2 & \\ \underline{4x} = \underline{8} & | :4 & \\ x = \underline{2} & & \end{array}$$

$$\begin{array}{lcl} \text{f) } 7x + 3 = 5x + 13 & | -5x & \\ \underline{2x} + 3 = \underline{13} & | -3 & \\ \underline{2x} = \underline{10} & | :2 & \\ x = \underline{5} & & \end{array}$$

2 Löse die Gleichung.

$$\begin{array}{lcl} \text{a) } 4x - 1 = 2x + 5 & | -2x & \\ \underline{2x} - 1 = \underline{5} & | +1 & \\ \underline{2x} = \underline{6} & | :2 & \\ x = \underline{3} & & \end{array}$$

$$\begin{array}{lcl} \text{b) } 5x + 1 = x + 9 & | -x & \\ \underline{4x} + 1 = \underline{9} & | -1 & \\ \underline{4x} = \underline{8} & | :4 & \\ x = \underline{2} & & \end{array}$$

$$\begin{array}{lcl} \text{c) } 3x - 3 = x + 7 & | -x & \\ \underline{2x} - 3 = \underline{7} & | +3 & \\ \underline{2x} = \underline{10} & | :2 & \\ x = \underline{5} & & \end{array}$$

$$\begin{array}{lcl} \text{d) } 5x + 2 = 3x + 8 & | -3x & \\ \underline{2x} + 2 = \underline{8} & | -2 & \\ \underline{2x} = \underline{6} & | :2 & \\ x = \underline{3} & & \end{array}$$

$$\begin{array}{lcl} \text{e) } 4x + 4 = x + 16 & | -x & \\ \underline{3x} + 4 = \underline{16} & | -4 & \\ \underline{3x} = \underline{12} & | :3 & \\ x = \underline{4} & & \end{array}$$

$$\begin{array}{lcl} \text{f) } 7x - 7 = 3x + 17 & | -3x & \\ \underline{4x} - 7 = \underline{17} & | +7 & \\ \underline{4x} = \underline{24} & | :4 & \\ x = \underline{6} & & \end{array}$$

$$\begin{array}{lcl} \text{g) } 15x + 13 = 7x + 69 & | -7x & \\ \underline{8x} + 13 = \underline{69} & | -13 & \\ \underline{8x} = \underline{56} & | :8 & \\ x = \underline{7} & & \end{array}$$

$$\begin{array}{lcl} \text{h) } 17x + 4 = 5x + 40 & | -5x & \\ \underline{12x} + 4 = \underline{40} & | -4 & \\ \underline{12x} = \underline{36} & | :12 & \\ x = \underline{3} & & \end{array}$$

$$\begin{array}{lcl} \text{i) } 19x + 16 = 11x + 80 & | -11x & \\ \underline{8x} + 16 = \underline{80} & | -16 & \\ \underline{8x} = \underline{64} & | :8 & \\ x = \underline{8} & & \end{array}$$

3 Fasse zuerst gleichartige Summanden zusammen. Löse dann die Gleichung.

$$\begin{array}{lcl} \text{a) } 7x - 13 + x + 1 = 3x + 18 & & \\ \underline{8x - 12} = \underline{3x + 18} & | -3x & \\ \underline{5x - 12} = \underline{18} & | +12 & \\ \underline{5x} = \underline{30} & | :5 & \\ x = \underline{6} & & \end{array}$$

$$\begin{array}{lcl} \text{b) } 5x + 3 - 2x - 5 = x + 13 & & \\ \underline{3x - 2} = \underline{x + 13} & | -x & \\ \underline{2x - 2} = \underline{13} & | +2 & \\ \underline{2x} = \underline{15} & | :2 & \\ x = \underline{7,5} & & \end{array}$$

$$\begin{array}{lcl} \text{c) } 2x - 2 + 4x + 6 = 3x + 19 & & \\ \underline{6x + 4} = \underline{3x + 19} & | -3x & \\ \underline{3x + 4} = \underline{19} & | -4 & \\ \underline{3x} = \underline{15} & | :3 & \\ x = \underline{5} & & \end{array}$$

$$\begin{array}{lcl} \text{d) } 3x - 2 + 3x - 1 = 8 + 2x + 9 & & \\ \underline{6x - 3} = \underline{2x + 17} & | -2x & \\ \underline{4x - 3} = \underline{17} & | +3 & \\ \underline{4x} = \underline{20} & | :4 & \\ x = \underline{5} & & \end{array}$$

$$\begin{array}{lcl} \text{e) } x - 5 + 2x + 2 = 3x + 3 - 2x + 4 & & \\ \underline{3x - 3} = \underline{x + 7} & | -x & \\ \underline{2x - 3} = \underline{7} & | +3 & \\ \underline{2x} = \underline{10} & | :2 & \\ x = \underline{5} & & \end{array}$$

$$\begin{array}{lcl} \text{f) } 5x - 1 - x - 1 = -2x - 6 + 3x - 2 & & \\ \underline{4x - 2} = \underline{x - 8} & | -x & \\ \underline{3x - 2} = \underline{-8} & | +2 & \\ \underline{3x} = \underline{-6} & | :3 & \\ x = \underline{-3} & & \end{array}$$