

1 Löse die Gleichung.

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

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

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

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

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

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

$$\begin{array}{lcl} \text{g) } 4x - 1 = x + 11 & | -x & \\ 3x - 1 = 11 & | +1 & \\ 3x = 12 & | :3 & \\ x = 4 & & \end{array}$$

$$\begin{array}{lcl} \text{h) } 7x - 2 = 3x + 14 & | -3x & \\ 4x - 2 = 14 & | +2 & \\ 4x = 16 & | :4 & \\ x = 4 & & \end{array}$$

$$\begin{array}{lcl} \text{i) } 8x - 11 = 3x + 9 & | -3x & \\ 5x - 11 = 9 & | +11 & \\ 5x = 20 & | :5 & \\ x = 4 & & \end{array}$$

2 Löse die Gleichung.

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

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

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

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

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

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

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

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

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

$$\begin{array}{lcl} \text{k) } 24x - 9 = 7x + 42 & | -7x & \\ 17x - 9 = 42 & | +9 & \\ 17x = 51 & | :17 & \\ x = 3 & & \end{array}$$

$$\begin{array}{lcl} \text{l) } 20x - 12 = 9x + 99 & | -9x & \\ 11x - 12 = 99 & | +12 & \\ 11x = 111 & | :11 & \\ x = 10,091 & & \end{array}$$

$$\begin{array}{lcl} \text{m) } 18x + 12 = 6x + 60 & | -6x & \\ 12x + 12 = 60 & | -12 & \\ 12x = 48 & | :12 & \\ x = 4 & & \end{array}$$

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

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

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

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

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

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

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