

$$T1: 2 * 3 - 4x - 5$$

$$T2: (-5) * x - 17 : 6 = (-5)x - 17 : 6 = -5x - 17 : 6$$

$$T1 = T2$$

$$2 * 3 - 4x - 5 = -5x - 17 : 6$$

$$6 - 4x - 5 = -5x - 2,83$$

$$1 - 4x = -5x - 2,83 \quad | + 5x$$

$$1 - 4x + 5x = -5x - 2,83 + 5x$$

$$1 + x = -2,83 \quad | - 1$$

$$1 + x - 1 = -2,83 - 1$$

$$x = -3,83 \quad L = \{-3,83\}$$

$$\text{Probe: } 2 * 3 - 4 * (-3,83) - 5 = -5 * (-3,83) - 17 : 6$$

$$16,32 = 16,32$$

$$T3: \frac{1}{2} + (-\frac{1}{2}) * 3 : 2 + 3x$$

$$T4: 18 : 3 + 2^2x$$

$$T3 = T4$$

$$\frac{1}{2} + (-\frac{1}{2}) * 3 : 2 + 3x = 18 : 3 + 2^2x$$

$$0,5 + (-0,75) + 3x = 6 + 4x$$

$$-0,25 + 3x = 6 + 4x \quad | - 3x$$

$$-0,25 + 3x - 3x = 6 + 4x - 3x$$

$$-0,25 = 6 + x \quad | - 6$$

$$-0,25 - 6 = 6 + x - 6 \quad | - 6$$

$$-6,25 = x \quad L = \{-6,25\}$$

$$\text{Probe: } \frac{1}{2} + (-\frac{1}{2}) * 3 : 2 + 3 * (-6,25) = 18 : 3 + 2^2 * (-6,25)$$

$$-19 = -19$$

$$T5: \frac{2}{3} - (-\frac{5}{8}) * \frac{3}{4} x$$

$$T6: 2x - x + 3 * 6 + x$$

$$T5 = T6$$

$$\frac{2}{3} - (-\frac{5}{8}) * \frac{3}{4} x = 2x - x + 3 * 6 + x$$

$$\frac{2}{3} - (-\frac{15}{32} x) = 2x + 18$$

$$\frac{2}{3} + \frac{15}{32} x = 2x + 18 \quad | -15/32 x$$

$$\frac{2}{3} + \frac{15}{32} x - \frac{15}{32} x = 2x + 18 - \frac{15}{32} x$$

$$\frac{2}{3} = \frac{49}{32} x + 18 \quad | -18$$

$$\frac{2}{3} - 18 = \frac{49}{32} x + 18 - 18$$

$$-17\frac{1}{3} = \frac{49}{32} x \quad | : 49/32$$

$$-17\frac{1}{3} : \frac{49}{32} = \frac{49}{32} x : \frac{49}{32}$$

$$-11\frac{47}{147} = x \quad L = \{-11,32\}$$

Probe:

$$\frac{2}{3} - (-\frac{5}{8}) * \frac{3}{4} * (-11\frac{47}{147}) = 2 * (-11\frac{47}{147}) - (-11\frac{47}{147}) + 3 * 6 + (-11\frac{47}{147})$$

$$-4,64 = -4,64$$

$$T1: 2 \cdot 3 - 4x - 5$$

$$T3: \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x$$

$$T1 = T3$$

$$2 \cdot 3 - 4x - 5 = \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x$$

$$6 - 4x - 5 = \frac{1}{2} + (-0,75) + 3x$$

$$1 - 4x = -0,25 + 3x \quad | + 4x$$

$$1 - 4x + 4x = -0,25 + 3x + 4x$$

$$1 = -0,25 + 7x \quad | + 0,25$$

$$1 + 0,25 = -0,25 + 7x + 0,25$$

$$1,25 = 7x \quad | : 7$$

$$1,25 : 7 = 7x : 7$$

$$0,18 = x \quad L = \{0,18\}$$

Probe:

$$2 \cdot 3 - 4 \cdot 0,18 - 5 = \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3 \cdot 0,18$$

$$0,28 = 0,29 \text{ ok Rundung}$$

$$T4: 18 : 3 + 2^2x$$

$$T6: 2x - x + 3 \cdot 6 + x$$

$$T4 = T6$$

$$18 : 3 + 2^2x = 2x - x + 3 \cdot 6 + x$$

$$6 + 4x = 2x + 18 \quad | -2x$$

$$6 + 4x - 2x = 2x + 18 - 2x$$

$$6 + 2x = 18 \quad | -6$$

$$6 + 2x - 6 = 18 - 6$$

$$2x = 12 \quad | : 2$$

$$2x : 2 = 12 : 2$$

$$x = 6 \quad L = \{6\}$$

$$\text{Probe: } 18 : 3 + 2^2 \cdot 6 = 2 \cdot 6 - 6 + 3 \cdot 6 + 6 \quad \rightarrow \quad 30 = 30$$

$$T1: 2 \cdot 3 - 4x - 5$$

$$T2: (-5) \cdot x - 17 : 6 = (-5)x - 17 : 6$$

$$T3: \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x$$

$$T1 + T2 = T3$$

$$2 \cdot 3 - 4x - 5 + (-5)x - 17 : 6 = \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x$$

$$6 - 4x - 5 - 5x - 2,83 = \frac{1}{2} - 0,75 + 3x$$

$$-9x - 1,83 = -0,25 + 3x \quad | + 9x$$

$$-9x - 1,83 + 9x = -0,25 + 3x + 9x \quad | + 9x$$

$$-1,83 = -0,25 + 12x \quad | + 0,25$$

$$-1,83 + 0,25 = -0,25 + 12x + 0,25$$

$$-1,83 + 0,25 = -0,25 + 12x + 0,25$$

$$-1,58 = 12x \quad | : 12$$

$$-0,13 = x \quad L = \{-0,13\}$$

Probe:

$$2 \cdot 3 - 4 \cdot (-0,13) - 5 + (-5) \cdot (-0,13) - 17 : 6 = \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3 \cdot (-0,13)$$

$$-0,66 = -0,64 \quad \text{ok Rundung}$$

$$\begin{aligned} \text{T1: } & 2 \cdot 3 - 4x - 5 \\ \text{T2: } & (-5) \cdot x - 17 : 6 = (-5)x - 17 : 6 \\ \text{T3: } & \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x \\ \text{T4: } & 18 : 3 + 2^2x \end{aligned}$$

$$\text{T1} + \text{T4} = \text{T3} + \text{T2}$$

$$\begin{aligned} 2 \cdot 3 - 4x - 5 + 18 : 3 + 2^2x &= \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x + (-5)x - 17 : 6 \\ 6 - 4x - 5 + 6 + 4x &= \frac{1}{2} + (-0,75) + 3x - 5x - 2,83 \\ 7 &= -3,08 - 2x && | + 2x \\ 7 + 2x &= -3,08 - 2x + 2x \\ 7 + 2x &= -3,08 && | - 7 \\ 7 + 2x - 7 &= -3,08 - 7 \\ 2x &= -10,08 && | : 2 \\ 2x : 2 &= -10,08 : 2 \\ x &= -5,04 && L = \{-5,04\} \end{aligned}$$

Probe:

$$2 \cdot 3 - 4 \cdot (-5,04) - 5 + 18 : 3 + 2^2 \cdot (-5,04) = \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3 \cdot (-5,04) + (-5) \cdot (-5,04) - 17 : 6$$

$$7 = 7$$

$$\begin{aligned} \text{T1: } & 2 \cdot 3 - 4x - 5 \\ \text{T2: } & (-5) \cdot x - 17 : 6 = -5x - 17 : 6 \\ \text{T3: } & \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x = 0,5 + (-0,5) \cdot 3 : 2 + 3x \\ \text{T4: } & 18 : 3 + 2^2x \\ \text{T5: } & \frac{2}{3} - (-\frac{5}{8}) \cdot \frac{3}{4} x = 0,67 - (-0,625) \cdot 0,75x \end{aligned}$$

$$\text{T2} + \text{T3} = \text{T1} + \text{T4} + \text{T5}$$

$$\begin{aligned} -5x - 17 : 6 + 0,5 + (-0,5) \cdot 3 : 2 + 3x &= 2 \cdot 3 - 4x - 5 + 18 : 3 + 2^2x + 0,67 - (-0,625) \cdot 0,75x \\ -5x - 2,83 + 0,5 + (-0,75) + 3x &= 6 - 4x - 5 + 6 + 4x + 0,67 - (-0,46875x) \\ -2x - 3,08 &= 7,67 + 0,46875x && | + 2x \\ -2x - 3,08 + 2x &= 7,67 + 0,46875x + 2x \\ -3,08 &= 7,67 + 2,46875x && | - 7,67 \\ -3,08 - 7,67 &= 7,67 + 2,46875x - 7,67 \\ -10,75 &= 2,46875x && | : 2,46875 \\ -10,75 : 2,46875 &= 2,46875x : 2,46875 \\ -4,35 &= x && L = \{-4,35\} \end{aligned}$$

Probe:

$$-5 \cdot (-4,35) - 17 : 6 + 0,5 + (-0,5) \cdot 3 : 2 + 3 \cdot (-4,35) = 2 \cdot 3 - 4 \cdot (-4,35) - 5 + 18 : 3 + 2^2 \cdot (-4,35) + 0,67 - (-0,625) \cdot 0,75 \cdot (-4,35)$$

$$5,62 = 5,63 \quad \text{ok Rundung}$$

$$\begin{aligned} \text{T1: } & 2 \cdot 3 - 4x - 5 && \text{T2: } & (-5) \cdot x - 17 : 6 = -5x - 17 : 6 \\ \text{T3: } & \frac{1}{2} + (-\frac{1}{2}) \cdot 3 : 2 + 3x = 0,5 + (-0,5) \cdot 3 : 2 + 3x && \text{T4: } & 18 : 3 + 2^2x \\ \text{T5: } & \frac{2}{3} - (-\frac{5}{8}) \cdot \frac{3}{4} x = 0,67 - (-0,625) \cdot 0,75x && \text{T6: } & 2x - x + 3 \cdot 6 + x \end{aligned}$$

$$\text{T1} + \text{T3} + \text{T5} = \text{T6} + \text{T4} + \text{T2}$$

$$\begin{aligned} 2 \cdot 3 - 4x - 5 + 0,5 + (-0,5) \cdot 3 : 2 + 3x + 0,67 - (-0,625) \cdot 0,75x &= 2x - x + 3 \cdot 6 + x + 18 : 3 + 2^2x + (-5x) - 17 : 6 \\ 6 - 4x - 5 + 0,5 + (-0,75) + 3x + 0,67 - (-0,46875x) &= 2x - x + 18 + x + 6 + 4x + (-5x) - 2,83 \\ 0,92 - 0,53125x &= x + 21,17 && | + 0,53125x \\ 0,92 - 0,53125x + 0,53125x &= x + 21,17 + 0,53125x \\ 0,92 &= 21,17 + 1,53125x && | - 21,17 \\ 0,92 - 21,17 &= 21,17 + 1,53125x - 21,17 \\ -20,25 &= 1,53125x && | : 1,53125 \\ -13,22 &= x && L = \{-13,22\} \end{aligned}$$

Probe:

$$2 \cdot 3 - 4 \cdot (-13,22) - 5 + 0,5 + (-0,5) \cdot 3 : 2 + 3 \cdot (-13,22) + 0,67 - (-0,625) \cdot 0,75 \cdot (-13,22) =$$

$$2 \cdot (-13,22) - (-13,22) + 3 \cdot 6 + (-13,22) + 18 : 3 + 2^2 \cdot (-13,22) + (-5 \cdot (-13,22)) - 17 : 6$$

$$8,44 = 7,95 \quad \text{ok Rundung}$$