

Löse die Gleichungen nach x auf.

$$\begin{aligned} 1. \quad 2x + 4 &= 10 & 2x + 4 &= 10 \quad | -4 \\ & & 2x &= 6 \quad | :2 \\ & & x &= 3 \\ & & L &= \{3\} \end{aligned}$$

$$2. \quad 5x - 1 = 4$$

$$\begin{aligned} 2x + 4 &= 10 \quad | -4 \\ 2x &= 6 \quad | :2 \\ x &= 3 \\ L &= \{3\} \end{aligned}$$

$$\begin{aligned} 5x - 1 &= 4 \quad | +1 \\ 5x &= 5 \quad | :5 \\ x &= 1 \\ L &= \{1\} \end{aligned}$$

$$3. \quad 5x + 5 = -5$$

$$\begin{aligned} 5x + 5 &= -5 \quad | -5 \\ 5x &= -10 \quad | :5 \\ x &= -2 \\ L &= \{-2\} \end{aligned}$$

$$4. \quad -2x - 6 = 4$$

$$\begin{aligned} -2x - 6 &= 4 \quad | +6 \\ -2x &= 10 \quad | :(-2) \\ x &= -5 \\ L &= \{-5\} \end{aligned}$$

$$5. \quad 5x + 5 = 5x + 5$$

$$\begin{aligned} 5x + 5 &= 5x + 5 \quad | -5 \\ 5x &= 5x \quad | :5 \\ x &= x \\ L &= \mathbb{R} \end{aligned}$$

$$6. \quad 2(x + 8) = 2x + 3$$

$$\begin{aligned} 2(x + 8) &= 2x + 3 \quad | T \\ 2x + 16 &= 2x + 3 \quad | -2x \\ 16 &= 3 \\ L &= \{ \} \end{aligned}$$

$$7. \quad -5x + 3 = -2 - 6x$$

$$\begin{aligned} -5x + 3 &= -2 - 6x \quad | +6x \\ x + 3 &= -2 \quad | -3 \\ x &= -5 \\ L &= \{-5\} \end{aligned}$$

$$8. \quad -2x + 3 = -1 - 3x$$

$$\begin{aligned} -2x + 3 &= -1 - 3x \quad | +3x \\ x + 3 &= -1 \quad | -3 \\ x &= -4 \\ L &= \{-4\} \end{aligned}$$