

1.

$$\begin{aligned}
 4 - 4x &= -2 \quad | -4 \\
 -4x &= -6 \quad | :(-4) \\
 x &= \frac{6}{4} = \frac{3}{2} \quad L = \left\{ \frac{3}{2} \right\}
 \end{aligned}$$

2.

$$\begin{aligned}
 \frac{7}{4}x - 2\frac{1}{2} &= -\frac{17}{4} \quad | + 2\frac{1}{2} \\
 \frac{7}{4}x &= -\frac{7}{4} \quad | : \frac{7}{4} \\
 x &= -1 \quad L = \{-1\}
 \end{aligned}$$

3.

$$\begin{aligned}
 9x - 9 &= -6x - 54 \quad | +6x \\
 15x - 9 &= -54 \quad | +9 \\
 15x &= -45 \quad | :15 \\
 x &= -3 \quad L = \{-3\}
 \end{aligned}$$

4.

$$\begin{aligned}
 9 + 6x &= 8 + 9x \quad | -6x \\
 9 &= 8 + 3x \quad | -8 \\
 1 &= 3x \quad | :3 \\
 \frac{1}{3} &= x \quad L = \left\{ \frac{1}{3} \right\}
 \end{aligned}$$

5.

$$\begin{aligned}
 6(4x - 5) - 4x &= 50 \quad | \text{T} \\
 24x - 30 - 4x &= 50 \quad | \text{T} \\
 20x - 30 &= 50 \quad | +30 \\
 20x &= 80 \quad | :20 \\
 x &= 4 \quad L = \{4\}
 \end{aligned}$$

6.

$$\begin{aligned}
 5(9x - 6) &= 7(5 - 2x) - 6 \\
 45x - 30 &= 35 - 14x - 6 \quad | \text{T} \\
 45x - 30 &= 29 - 14x \quad | +14x \\
 59x - 30 &= 29 \quad | +30 \\
 59x &= 59 \quad | :59 \\
 x &= 1 \quad L = \{1\}
 \end{aligned}$$

$$\begin{aligned}
 1. \quad & 2 + 9x = 9 \quad | -2 \\
 & 9x = 7 \quad | :9 \\
 & x = \frac{7}{9} \quad L = \left\{ \frac{7}{9} \right\}
 \end{aligned}$$

$$\begin{aligned}
 2. \quad & \frac{3}{4}x - 2\frac{1}{4} = \frac{9}{2} \quad | + 2\frac{1}{4} \\
 & \frac{3}{4}x = \frac{27}{4} \quad | : \frac{3}{4} \\
 & x = \frac{\frac{27}{4} \cdot \frac{4}{3}}{\frac{3}{4} \cdot \frac{4}{3}} = 9 \quad L = \{9\}
 \end{aligned}$$

$$\begin{aligned}
 3. \quad & x - 5 = 1 + 2x \quad | -x \\
 & -5 = 1 + x \quad | -1 \\
 & -6 = x \quad L = \{-6\}
 \end{aligned}$$

$$\begin{aligned}
 4. \quad & 7 + 2x = 8x - 4 \quad | -2x \\
 & 7 = 6x - 4 \quad | +4 \\
 & 11 = 6x \quad | :6 \\
 & \frac{11}{6} = x \quad L = \left\{ \frac{11}{6} \right\}
 \end{aligned}$$

$$\begin{aligned}
 5. \quad & 2(x - 9) - 6x = -6 \quad | \top \\
 & 2x - 18 - 6x = -6 \quad | \top \\
 & -4x - 18 = -6 \quad | +18 \\
 & -4x = 12 \quad | :(-4) \\
 & x = -3 \quad L = \{-3\}
 \end{aligned}$$

$$\begin{aligned}
 6. \quad & 9(-6x - 8) = 7(-8x - 3) - 67 \quad | \top \\
 & -54x - 72 = -56x - 21 - 67 \quad | \top \\
 & -54x - 72 = -56x - 88 \quad | +56x \\
 & 2x - 72 = -88 \quad | +72 \\
 & 2x = -16 \quad | :2 \\
 & x = -8 \quad L = \{-8\}
 \end{aligned}$$