

$$\begin{aligned}
 1) \quad & 7x+6=3x \\
 & 7x-3x=-6 \\
 & 4x=-6 \quad |:4 \\
 & x=\frac{-6}{4} \\
 & x=-1,5
 \end{aligned}$$

Ответ: -1,5

$$\begin{aligned}
 2) \quad & 3+4x=9x-11 \\
 & 4x-9x=-11-3 \\
 & -5x=-14 \quad |:(-5) \\
 & x=\frac{-14}{-5} \\
 & x=2,8
 \end{aligned}$$

Ответ: 2,8

$$\begin{aligned}
 3) \quad & 2(x+5)=-9 \quad \text{или} \\
 & 2x+10=-9 \quad 2(x+5)=-9 \quad |:2 \\
 & 2x=-9-10 \quad x+5=-4,5 \\
 & 2x=-19 \quad |:2 \quad x=-4,5-5 \\
 & x=-9,5 \quad x=-9,5
 \end{aligned}$$

Ответ: -9,5

$$\begin{aligned}
 4) \quad & \frac{x}{1} - \frac{x}{18} = -\frac{34}{9} \\
 & \frac{18x}{18} - \frac{x}{18} = -\frac{68}{18} \quad | \cdot 18 \\
 & 18x - x = -68 \\
 & 17x = -68 \quad |:17 \\
 & x = -68:17 \\
 & x = -4
 \end{aligned}$$

Ответ: -4

$$\begin{aligned}
 5) \quad & \frac{16}{x+3} = -\frac{8}{11} \quad |:8 \\
 & \frac{2}{x+3} = -\frac{1}{11} \\
 & x+3 \neq 0 \quad x \neq -3 \\
 & \text{по правилу пропорции:} \\
 & 2 \cdot 11 = (x+3) \cdot (-1) \\
 & 22 = -x-3 \\
 & x = -3-22 \\
 & x = -25
 \end{aligned}$$

$$\begin{aligned}
 \text{или} \\
 & \frac{16}{x+3} = -\frac{8}{11} \quad (2) \\
 & \frac{16}{x+3} = \frac{16}{-22} \\
 & x+3 = -22 \\
 & x = -22-3 \\
 & x = -25
 \end{aligned}$$