

# Линарне једначине

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$$2) \frac{2x-3}{5} - \frac{x+1}{2} - \frac{x-11}{10} = 0 \quad / \cdot 10$$

$$\frac{10}{1} \cdot \frac{2x-3}{5} - \frac{5}{1} \cdot \frac{x+1}{2} - \frac{10}{1} \cdot \frac{x-11}{10} = 10 \cdot 0$$

$$2 \cdot (2x-3) - 5 \cdot (x+1) - (x-11) = 0$$

$$4x - 6 - 5x - 5 - x + 11 = 0$$

$$-2x + 0 = 0$$

$$-2x = 0$$

$$x = 0 : (-2) = 0$$

$$3) \frac{3(x-1)}{2} + \frac{x-4}{3} = 12 - \frac{x+1}{2} \quad / \cdot 6$$

$$\frac{6}{1} \cdot \frac{3x-3}{2} + \frac{6}{1} \cdot \frac{x-4}{3} = 6 \cdot 12 - \frac{6}{1} \cdot \frac{x+1}{2}$$

$$3 \cdot (3x-3) + 2 \cdot (x-4) = 72 - 3 \cdot (x+1)$$

$$9x - 9 + 2x - 8 = 72 - 3x - 3$$

$$11x - 17 = 69 - 3x$$

$$11x + 3x = 69 + 17$$

$$14x = 86$$

$$x = \frac{86}{14} \stackrel{E2}{\sim}$$

$$x = \frac{43}{7}$$

Помоћу:

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$$4) 4\left(x + \frac{5}{4}\right) - 3\left(3x - \frac{1}{3}\right) = 4 \quad -5x = 4 - 4$$

$$4x + \frac{4}{1} \cdot \frac{5}{4} - 9x - \frac{3}{1} \cdot \left(-\frac{1}{3}\right) = 4 \quad -5x = 0$$

$$x = 0$$

$$4x \cdot 5 - 9x + 1 = 4$$

$$-5x + 4 = 4$$

$$\begin{aligned} \text{r)} \quad \frac{5}{6}x - \frac{1}{8}(x-4) &= \frac{7}{4}x \quad / \cdot 24 \\ \frac{20}{1} \cdot \frac{5}{6}x - \frac{24}{1} \cdot \frac{1}{8}(x-4) &= \frac{24}{1} \cdot \frac{7}{4}x \\ 4 \cdot 5x - 3 \cdot (x-4) &= 6 \cdot 7x \\ 20x - 3x + 12 &= 42x \\ 17x + 12 &= 42x \end{aligned}$$

$$\begin{aligned} \swarrow \quad 17x - 42x &= -12 & \searrow \quad 12 = 42x - 17x \\ -25x &= -12 & 12 = 25x \\ x &= \frac{-12}{-25} & x &= \frac{12}{25} \end{aligned}$$

$$x = \frac{12}{25}$$

$$\textcircled{c} \quad \frac{2x+3}{3} - \frac{5x-14}{12} = \frac{x+1}{4} - 3$$

$$\frac{12}{1} \cdot \frac{2x+3}{3} - \frac{12}{1} \cdot \frac{5x-14}{12} = \frac{12}{1} \cdot \frac{x+1}{4} - 12 \cdot 3$$

$$4(2x+3) - (5x-14) = 3(x+1) - 36$$

$$8x + 12 - 5x + 14 = 3x + 3 - 36$$

$$3x + 26 = 3x - 33$$

$$3x - 3x = -33 - 26$$

$$0 = -59 \quad \text{Нема решения}$$