Домаћи
126 в)
130 б)

Линеарне једначине

(126) а) $\frac{x-1}{2} - \frac{x+1}{2} - \frac{1+x}{2} - \frac{1+x}{2} + 2 = 0 \quad / \cdot 2$

$\frac{2}{1} \cdot \frac{x-1}{2} - \frac{2}{1} \cdot \frac{x+1}{2} - \frac{2}{1} \cdot \frac{1-x}{2} - \frac{2}{1} \cdot \frac{1+x}{2} + 2 \cdot 2 = 0 \cdot 2$

$x - 1 - (x+1) - (1-x) - (1+x) + 4 = 0$

$x - 1 - x - 1 - 1 + x - 1 - x + 4 = 0$

$-4 + 4 = 0$

$\boxed{0 = 0}$

*Када је $0=0$ једначина има бесконачно решења $x \in \mathbb{R}$

б) $\frac{x-4}{3} + \frac{2(x+1)}{4} - 1 = \frac{5(x-3)}{2} + 2x - \frac{11x+43}{6} \quad / \cdot 12$

$\frac{12}{1} \cdot \frac{x-4}{3} + \frac{12}{1} \cdot \frac{2(x+1)}{4} - 12 \cdot 1 = \frac{12}{1} \cdot \frac{5(x-3)}{2} + 12 \cdot 2x - \frac{12}{1} \cdot \frac{11x+43}{6}$

$4 \cdot (x-4) + 3 \cdot (2x+2) - 12 = 6 \cdot (5x-15) + 24x - 2 \cdot (11x+43)$

$4x - 16 + 6x + 6 - 12 = 30x - 90 + 24x - 22x - 86$

$10x - 10 - 12 = 32x - 176$

$10x - 22 = 32x - 176$

$16x - 32x = -176 + 22 \qquad -22 + 176 = 32x - 10x$

$-22x = -154 \qquad 154 = 22x$

$x = \frac{-154}{-22} = \frac{154}{22} = \boxed{7} \qquad x = \frac{154}{22} = \boxed{7}$

136 a) $(2x-1)^2-(x+1)^2=0$

$(2x)^2-2\cdot 2x\cdot 1+1^2-(x^2+2\cdot x\cdot 1+1^2)=0$

$4x^2-4x+1-x^2-2x-1=0$

$3x^2-6x=0$

$3x\cdot(x-2)=0$

$3x=0 \quad x-2=0$

$\boxed{x_1=0} \quad \boxed{x_2=2}$