

S.151

(716)

$$\begin{array}{rcl}
 a) & \cancel{8z} + 3 = \cancel{6z} + 2 & \parallel -6z \\
 & 2z + \cancel{3} = \cancel{2} & \parallel -3 \\
 & \frac{2z}{2} = \frac{-1}{2} & \parallel :2 \\
 & z = -\frac{1}{2} (= -0,5) & 
 \end{array}$$

$$\begin{array}{rcl}
 b) & \cancel{7x} + 1 = \cancel{5x} - 1 & \parallel -5x \\
 & 2x + \cancel{1} = \cancel{-1} & \parallel -1 \\
 & \frac{2x}{2} = \frac{-2}{2} & \parallel :2 \\
 & x = -1 & 
 \end{array}$$

$$\begin{array}{rcl}
 c) & \frac{x}{3} - \cancel{3} = \cancel{3} & \parallel +3 \\
 & \frac{3 \cdot x}{3} = 6 \cdot 3 & \parallel \cdot 3 \\
 & x = 18 & 
 \end{array}$$

$$\begin{array}{rcl}
 d) & \frac{x}{2} + \cancel{1} = \cancel{6} & \parallel -1 \\
 & \frac{2 \cdot x}{2} = 5 \cdot 2 & \parallel \cdot 2 \\
 & x = 10 & 
 \end{array}$$

(717)

$$\begin{array}{rcl}
 a) & \cancel{7x} - 3 = \cancel{7x} + 3 & \parallel -7x \\
 & -3 = 3 & \\
 & \text{epätösi} & \\
 & \text{ei ratkaisua} & 
 \end{array}$$

$$\begin{aligned}
 \text{b)} \quad & \cancel{2x} + 4 = \cancel{4x} + 6 && \parallel -2x \\
 & \cancel{4} = \cancel{2x} + 6 && \parallel -6 \\
 & -\frac{2}{2} = \frac{2x}{2} && \parallel :2 \\
 & -1 = x \\
 & x = -1
 \end{aligned}$$

$$\begin{aligned}
 \text{c)} \quad & \cancel{x} - 9 = \cancel{6x} + 25 && \parallel -x \\
 & -\cancel{9} = \cancel{5x} + \cancel{25} && \parallel -25 \\
 & -\frac{34}{5} = \frac{5x}{5} && \parallel :5 \\
 & -6\frac{4}{5} = x \\
 & x = -6\frac{4}{5} (= -6,8)
 \end{aligned}$$

$$\begin{aligned}
 \text{d)} \quad & \cancel{30x} + 11 = \cancel{20x} - 2 && \parallel -20x \\
 & 10x + \cancel{11} = \cancel{-2} && \parallel -11 \\
 & \frac{10x}{10} = \frac{-13}{10} && \parallel :10 \\
 & x = -1\frac{3}{10} (= -1,3)
 \end{aligned}$$