

esim. $\cancel{x}^0 + 2 = \cancel{x}^0 + 3 \quad \parallel -x$

$$2 = 3$$

epätosi

ei ole ratkaisua

esim. $\cancel{x}^0 + 2 = \cancel{x}^0 + 2 \quad \parallel -x$

$$2 = 2$$

aina tosi

ratkaisuna

kaikki luvut

S.90

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a) $\cancel{12}^{8y} y - 5 = \cancel{4}^0 y + 35 \quad \parallel -4y$

$$8y - \cancel{5}^0 = \cancel{35}^{40} \quad \parallel +5$$

$$\frac{8y}{8} = \frac{40}{8} \quad \parallel :8$$

$$y = 5$$

$$b) \quad \overset{5x}{\cancel{7x}} - 9 = \overset{0}{\cancel{2x}} + 11 \quad // -2x$$

$$5x - \overset{0}{\cancel{9}} = \overset{20}{\cancel{11}} \quad // +9$$

$$\frac{5x}{5} = \frac{20}{5} \quad // :5$$

$$x = 4$$

$$c) \quad \overset{6x}{\cancel{9x}} - 2 = \overset{0}{\cancel{3x}} + 10 \quad // -3x$$

$$6x - \overset{0}{\cancel{2}} = \overset{12}{\cancel{10}} \quad // +2$$

$$\frac{6x}{6} = \frac{12}{6} \quad // :6$$

$$x = 2$$

$$d) \quad \overset{0}{\cancel{5x}} - 10 = \overset{0}{\cancel{5x}} \quad // -5x$$

$$-10 = 0$$

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$$a) \quad 2x - \overset{0}{\cancel{4}} = \overset{5}{\cancel{1}} \quad // +4$$

$$\frac{2x}{2} = \frac{5}{2} \quad // :2$$

$$x = \frac{5}{2} = 2\frac{1}{2}$$

$$\begin{aligned}
 \text{b)} \quad & \cancel{7}^{\cancel{2y}} y - 9 = \cancel{5}^{\cancel{0}} y + 13 \quad \parallel -5y \\
 & 2y - \cancel{9}^{\cancel{0}} = \cancel{13}^{\cancel{22}} \quad \parallel +9 \\
 & \underline{\underline{2y}} = \underline{\underline{22}} \quad \parallel :2 \\
 & y = 11
 \end{aligned}$$

$$\begin{aligned}
 \text{c)} \quad & 10 - \cancel{x}^{\cancel{0}} = 12 - \cancel{x}^{\cancel{0}} \quad \parallel +x \\
 & 10 = 12 \\
 & \text{epätösi} \\
 & \text{ei ole ratkaisua}
 \end{aligned}$$

$$\begin{aligned}
 \text{d)} \quad & \cancel{5}^{\cancel{2x}} x + 8 = \cancel{3}^{\cancel{0}} x + 3 \quad \parallel -3x \\
 & 2x + \cancel{8}^{\cancel{0}} = \cancel{3}^{\cancel{-5}} \quad \parallel -8 \\
 & \underline{\underline{2x}} = \underline{\underline{-5}} \quad \parallel :2 \\
 & x = -\frac{5}{2} = -2\frac{1}{2}
 \end{aligned}$$