

468

$$b) 2x - 6 = x + 1$$

$$2x - x = 1 + 6$$

$$\underline{x = 7}$$

TAVOITE:
x yhelle puolelle
vain numeroita,
toisella puolella

$$c) 5x = 3x + 8$$

$$5x - 3x = 8$$

$$2x = 8$$

$$\underline{x = 4}$$

$$\boxed{||:2}$$

$$d) 3x - 1 = 3 - x$$

$$3x + x = 3 + 1$$

$$4x = 4$$

$$\underline{x = 1}$$

$$||:4$$

s. 91

469

ETUMERKKI
VASTAUS
x →

TAVOITE:

x = ?

$$a) 4x + 5 = 3x + 1$$

$$4x - 3x = 1 - 5$$

$$x = -4$$

ESIM.

$$4 \cdot (-4) + 5 = 3 \cdot (-4) + 1$$

$$-16 + 5 = -12 + 1$$

$$-11 = -11$$

$$b) 8x + 4 = 7x + 6$$

$$8x - 7x = 6 - 4$$

$$x = 2$$

469

$$\begin{aligned}c) \quad 10x + 4 &= 8x + 8 \\ 10x - 8x &= 8 - 4 \\ 2x &= 4 \\ \underline{\underline{x}} &= \underline{\underline{2}}\end{aligned}$$

||:2

ESIM.

$$4 - 8 = 8x - 10x$$

$$-4 = -2x$$

$$2 = x$$

||:(-2)

$$d) \quad 14x + 6 = 7x + 13$$

$$14x - 7x = 13 - 6$$

$$7x = 7$$

||:7

$$\underline{\underline{x}} = \underline{\underline{1}}$$

173

$$d) 5x - 10 = 5x$$

$$5x - 5x = 10$$

$$0 = 10$$

lause ~~er~~ epätösi

$$5x = 5 \cdot x$$

$$5 - 5 = 0$$

$$0 \cdot x = 0$$

$$b) 7x - 9 = +2x + 11$$

$$7x - 2x = 11 + 9$$

$$5x = 20$$

$$x = 4$$

$$11 : 5$$

476

$$\begin{aligned} \text{c) } x+1+x &= 2x+1 \\ 2x+1 &= 2x+1 \\ 2x-2x &= 1-1 \\ 0 &= 0 \end{aligned}$$

lause aina tosi
x voi olla mitä vain
 $x \in \mathbb{R}$

$$\text{b) } \cancel{7y-9=5y+13}$$

$$12-5x=0$$

$$12 = 5x \quad \cancel{+0} \quad || :5$$

$$\frac{12}{5} = x$$

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

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