

KOTITEHTÄVÄT 501-503

Sivu 94.

501.

a) $3(x+2) = 15$

$$3x + 6 = 15 \quad \| -6$$

$$3x = 9 \quad \| : 3$$

$$x = 3$$

b) $2(x+4) = 14$

$$2x + 8 = 14 \quad \| -8$$

$$2x = 6 \quad \| : 2$$

$$x = 3$$

c) $2(3x+4) = 26$

$$6x + 8 = 26 \quad \| -8$$

$$6x = 18 \quad \| : 6$$

$$x = 3$$

d) $3(5x-2) = -21$

$$15x - 6 = -21 \quad \| +6$$

$$15x = -15 \quad \| : 15$$

$$x = -1$$

502.

a) $2(1+4x) = 10x-5$

$$2 + 8x = 10x - 5 \quad \| -10x$$

$$2 - 2x = -5 \quad \| +2$$

$$-2x = -7 \quad \| : (-2)$$

$$x = \frac{-7}{-2} = 3,5$$

b) $9x-1 = 2(1+4x)$

$$9x - 1 = 2 + 8x \quad \| -8x$$

$$x - 1 = 2 \quad \| +1$$

$$x = 3$$

c) $9y-2 = 2(3y+5)$

$$9y - 2 = 6y + 10 \quad \| -6y$$

$$3y - 2 = 10 \quad \| +2$$

$$3y = 12 \quad || : 3$$

$$y = 4$$

$$\text{d)} \quad 2(5 - y) = 22 - 5y$$

$$10 - 2y = 22 - 5y \quad || + 5y$$

$$10 + 3y = 22 \quad || - 10$$

$$3y = 12 \quad || : 3$$

$$y = 4$$

503.

$$\text{a)} \quad 3(3x + 1) = 2(4x + 6)$$

$$9x + 3 = 8x + 12 \quad || - 3$$

$$9x = 8x + 9 \quad || - 8x$$

$$x = 9$$

$$\text{b)} \quad 2(5x + 2) = 4(2x + 3)$$

$$10x + 4 = 8x + 12 \quad || - 8x$$

$$2x + 4 = 12 \quad || - 4$$

$$2x = 8 \quad || : 2$$

$$x = 4$$

$$\text{c)} \quad 7(x + 1) = 4(x + 4)$$

$$7x + 7 = 4x + 16 \quad || - 4x$$

$$3x + 7 = 16 \quad || - 7$$

$$3x = 9 \quad || : 3$$

$$x = 3$$

$$\text{d)} \quad 2(x + 1) = 2x - 5$$

$$2x + 2 = 2x - 5 \quad || - 2x$$

$$2 = -5 \quad \text{ei ratkaisua.}$$