



$$1a) a-5 \quad c) x:4 \quad e) (x+y) \cdot 2$$

$$b) 3 \cdot b + 2 \quad d) 4 \cdot a - 3 \cdot b \quad f) a^2 - b^2$$

$$4) \quad a) 72 = 4 \cdot 1,5 \cdot 12 \quad c) 4 \underset{2,5}{x} : 3 = 12$$

$$b) 5 \underset{7}{x} + 3 = 38 \quad d) 215 - 2 = 209$$

$$6) \quad a) (3 \cdot a + a) \cdot 2$$

$$\begin{aligned} 7 \text{ b} \quad & 0,7 - 1,8 + 2,1x^2 - 1,5x + 3,5 \\ & = -1,1 + 2,1x^2 - 1,5x + 3,5 \end{aligned}$$

$$\begin{aligned} 8 \text{ b} \quad & 1,5x - (-3y + 2,5x) \\ & = -x + 3y \end{aligned}$$

$$\begin{aligned} 9 \text{ b} \quad & 5a \cdot 1,2b \cdot 3 \\ & = 18ab \end{aligned}$$

$$\begin{aligned} 10 \text{ b} \quad & (x - 0,2y) \cdot 7x \\ & = 7x^2 - 1,4xy \end{aligned}$$

$$\begin{aligned} 11 \text{ b} \quad & -5x(4 - 2x) + (x + 4)(x - 4) \\ & = 11x^2 - 20x - 16 \end{aligned}$$

$$\begin{aligned} 12 \text{ b} \quad & xy + x2 \\ & = x(y + 2) \end{aligned}$$

$$\begin{aligned} 13 \text{ b} \quad & (3 - x)^2 \\ & = 9 - 6x + x^2 \end{aligned}$$

$$\begin{aligned} 14 \text{ b} \quad & b^2 : b^3 \\ & = b^{-1} \end{aligned}$$

$$15 \text{ b} \quad \boxed{b^3} : b^3 = 1$$

Aufgabe 3

S. 221, Nr. 17 a-d

$$a) \underbrace{x}_{24} + 37 = 111$$

$$c) 7 \cdot \underbrace{a}_{12} = 84$$

$$b) \underbrace{y}_{47} - 13 = 28$$

$$d) \underbrace{b}_{52} : 4 = 13$$

Nr. 18 a-d

$$a) 4x + 3 = 3x - 7$$

$$x + 3 = -7$$

$$x = -10$$

$$|-3x$$

$$|-3$$

$$b) 70 - 3z + 8z = 78 + 3z$$

$$70 - 6z + 5z = 78$$

$$6z + 5z = 8$$

$$z = 8$$

$$|-3z$$

$$|-70$$

$$|-5z$$

$$c) 5a + 3(2a - 6) = 14 + 12a$$

$$5a + 6a - 12 = 14 + 12a \quad | -12$$

$$5a + 6a = 26 + 12a \quad | -12a$$

$$-7a + (-6a) = 26$$

$$-13a = 26$$

$$a = -2$$

$$|-12$$

$$|-12a$$

$$|+6a$$

$$|:-1$$

$$d) 3x - (x - 7) = 19$$

$$3x - (-7x) = 19 \quad | +7x$$

$$10x = 19 \quad | :10$$

$$x = 1,9$$

$$|:10$$

Nr. 19 $b+c$

$$b) 18 + 5(3a - 2) = 2(7a + 1)$$

$$18 + 15a - 10 = 14a + 2 \quad | +10$$

$$28 + 15a = 14a + 2 \quad | -14a$$

$$28 + 1a = 2 \quad | -28$$

$$1a = -26 \quad | :1$$

$$a = -26$$

$$c) (4y - 3)5 - 6y = -4(5 + 9y)$$

$$20y - 15 - 6y = -20 + (-36y) \quad | +6y$$

$$26y - 15 = -20 + (-36y) \quad | +36y$$

$$62y - 15 = -20 \quad | +15$$

$$62y = -5 \quad | :62$$

$$y = -0,08$$

$$\text{Nr. 23} \quad \underbrace{a}_{23\text{cm}} \cdot \underbrace{b}_{29\text{cm}} = 667\text{cm}^2$$