Oppgaver for kapittel 0

0.2.1

Solve the equation.

a) $x + 8 = 18$ b) $x - 3 = 2$ c) $x - 8 = 1$

d) $x + 12 = 14$ e) $x - 1 = 2$ f) $x - 3 = 1$

g) $21 = x + 11$ h) $24 = x + 16$ i) $4 = x - 6$

0.2.2

Solve the equation.

a) $16x - 20 = 15x + 17$ b) $18x - 11 = 17x + 18$

c) $17x - 15 = 16x + 8$ d) $4x - 9 = 6 + 3x$

e) $12x - 6 = 11x + 2$ f) $2x + 10 = 3x - 1$

g) $5 + 8x = 9x - 18$ h) $15 + 2x = 3x - 4$

i) $9x + 8 = 10x - 2$ j) $17x + 9 = 18x - 19$

0.2.3

Solve the equation.

a) $3x = 12$ b) $10x = 50$ c) $7x = 63$ d) $2x = 30$

0.2.4

Solve the equation.

a) $\frac{x}{4} = 2$ b) $\frac{x}{9} = 8$ c) $\frac{x}{7} = 7$ d) $\frac{x}{15} = 10$

0.2.5

Solve the equation.

a) $18x - 27 = 9x + 36$ b) $7x - 27 = 4x + 3$

c) $15x - 16 = 7x + 32$ d) $13x - 42 = 7x + 12$

e) $4 + 9x = 13x - 32$ f) $7x + 8 = 11x - 24$

g) $5x + 4 = 8x - 11$ h) $7 + 10x = 14x - 9$

0.2.6

Given $\triangle ABC$ with $\angle C = 90°$. Prove that

$$\angle A = 90° - \angle B$$

0.2.7 (E22)

Solve the equation

$$3 \cdot 24 \cdot 9 = 4 \cdot 9 \cdot x$$

0.5.1 (1TV21D1)

Solve the equation set.

$$2x - y = 4$$

$$x - 2y = 5$$

Gruble 1

a) Prove that

$$0{,}2626... = \frac{26}{99}$$

Given

$$a = b\left(\frac{1}{10^c} + \frac{1}{10^{2c}} + \frac{1}{10^{3c}} + ...\right)$$

where b is a number with c digits.

b) Prove that if $b = 26$, then $a = 0{,}2626...$.

c) Prove that

$$a = \frac{b}{10^c - 1}$$