Harjoittele s.

58 Mittakaava

719

Vastinkulmat

$\measuredangle A = 77^\circ$ $\measuredangle B = 41^\circ$ $\measuredangle C = 62^\circ$

$\measuredangle D = 77^\circ$ $\measuredangle E = 41^\circ$ $\measuredangle F = 62^\circ$

ovat yhtä suuria

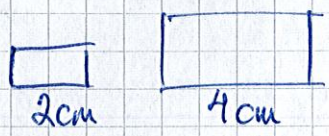
$$\frac{DE}{AB} = \frac{31\text{ mm}}{62\text{ mm}} = \frac{1}{2}$$

$$\frac{EF}{BC} = \frac{34\text{ mm}}{68\text{ mm}} = \frac{1}{2}$$

$$\frac{DF}{AC} = \frac{23\text{ mm}}{46\text{ mm}} = \frac{1}{2}$$

720

a)



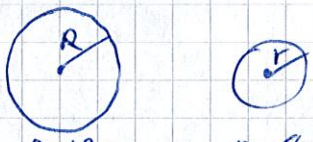
Mittakaava aina supistettussa, yksinkertaisimmassa muodossa

Mittakaava Kuva : Alkuperäinen

4 : 2

2 : 1 V: 2:1

b)



R=12cm r=8cm

Kuva : Alkuperäinen

8 : 12

2 : 3 V: 2:3

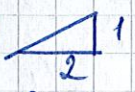
721

a) 1 : 3

Kanta $\frac{1}{3} \cdot 6 = \frac{6}{3} = 2$

Korkeus $\frac{1}{3} \cdot 3 = \frac{3}{3} = 1$

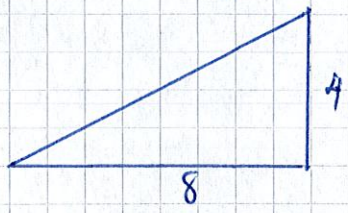
kuva



b) 4 : 3

Kanta $\frac{4}{3} \cdot 6 = 4 \cdot 2 = 8$

Korkeus $\frac{4}{3} \cdot 3 = 4$



Sovella s. 127

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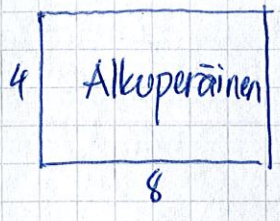
722 a) Kuva : Alkuperäinen
3,5 : 140 ||·2
7 : 280 ||:7
1 : 40 V: 1:40

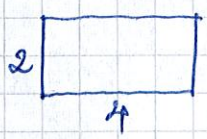
b) Kuva : Alkuperäinen
2,5 : 500 sama yksikkö!
5 : 1000
1 : 200 V: 1:200

c) Kuva : Alkuperäinen
39 : 13 ||:13
3 : 1 V: 3:1

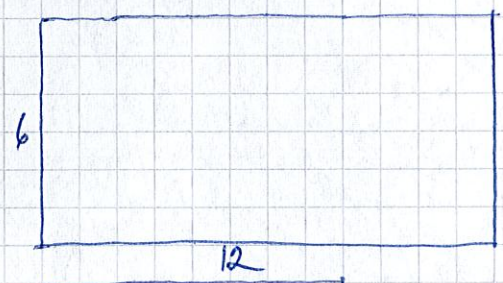
723



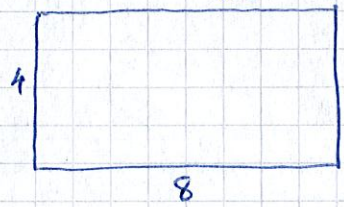
a) 1:2
Kanta $\frac{8}{2} = 4$
Korkeus $\frac{4}{2} = 2$



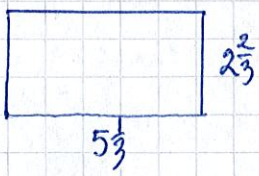
b) 3:2
Kanta $\frac{3}{2} \cdot 8 = \frac{24}{2} = 12$
Korkeus $\frac{3}{2} \cdot 4 = \frac{12}{2} = 6$



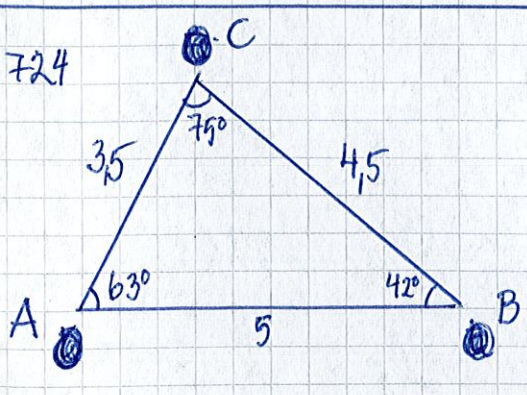
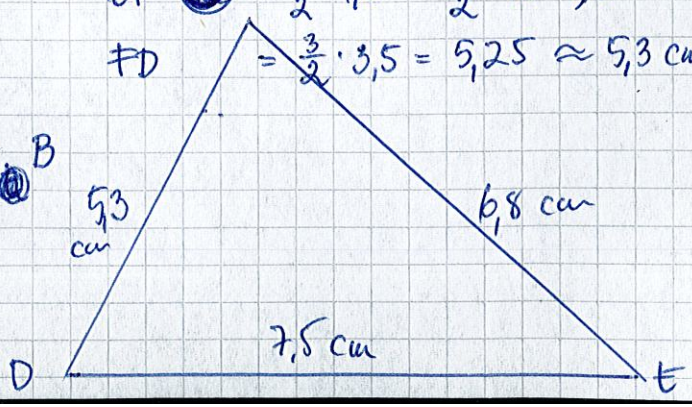
c) 1:1 Kanta $8 \cdot 1 = 8$
Korkeus $4 \cdot 1 = 4$



d) 2:3 Kanta $\frac{2}{3} \cdot 8 = 5\frac{1}{3}$
Korkeus $\frac{2}{3} \cdot 4 = 2\frac{2}{3}$



724



DE $= \frac{3}{2} \cdot 5 = 7{,}5$ cm
EF $= \frac{3}{2} \cdot 4{,}5 = \frac{13{,}5}{2} \approx 6{,}75 \approx 6{,}8$ cm
FD $= \frac{3}{2} \cdot 3{,}5 = 5{,}25 \approx 5{,}3$ cm