

1. По данните от чертежа намерете лицата на триъгълници  $AMC$ ,  $MKC$ ,  $BKC$  и  $ABC$ .

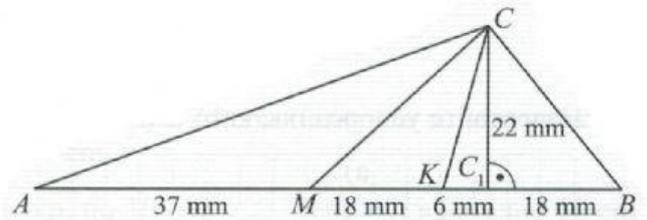
Решение.

$$S_{AMC} = \frac{AM \cdot CC_1}{2} = \frac{37 \cdot 22}{2} = 37. = \text{mm}^2$$

$$S_{MKC} = \frac{MK \cdot CC_1}{2} = \dots = \dots = \text{mm}^2$$

$$S_{BKC} = \frac{BK \cdot CC_1}{2} = \dots = \dots = \text{mm}^2$$

I начин  $S_{ABC} = \dots + \dots = \dots \text{mm}^2$



II начин  $AB = \dots + \dots + \dots = \dots \text{mm}$

$$S_{ABC} = \dots = \dots = \dots \text{mm}^2$$

2. Намерете страната  $b$  на триъгълника  $ABC$ , ако  $a = 81 \text{ dm}$ ,  $h_a = 4 \text{ m}$  и  $h_b = 36 \text{ dm}$ .

Решение.  $h_a = 4 \text{ m} = \dots \text{ dm}$

$$S = \frac{a \cdot h_a}{2} = \dots \text{ dm}^2 ; S = \frac{b \cdot h_b}{2} ; \dots = \frac{b \cdot \dots}{2} ; b = \dots \text{ dm}$$

3. Триъгълник  $ABC$  има лице  $S$ , страни  $a$  и  $b$  и съответни височини  $h_a$  и  $h_b$ . Попълнете таблицата.

$a$	3 cm	32 mm	21 dm	dm
$b$	6 cm	64 mm	cm	400 cm
$h_a$	2 cm	mm	dm	2 m
$h_b$	cm	mm	35 cm	9 dm
$S$	cm <sup>2</sup>	256 mm <sup>2</sup>	1785 cm <sup>2</sup>	dm <sup>2</sup>

$$S = \frac{a \cdot h_a}{2} = \frac{\dots}{2} = \dots \text{ cm}^2 ; \dots = \frac{h_b \cdot \dots}{2} ; h_b = \dots \text{ cm}$$

$$S = \frac{a \cdot h_a}{2} ; 2 \cdot S = a \cdot h_a ; h_a = \frac{2 \cdot S}{a} ; h_b = \frac{2 \cdot S}{b}$$

$$h_a = \frac{2 \cdot S}{a} = \frac{2 \cdot \dots}{\dots} = \dots \text{ mm}$$

$$h_b = \frac{2 \cdot S}{b} = \frac{2 \cdot \dots}{\dots} = \dots \text{ mm}$$

$$b = 400 \text{ cm} = \dots \text{ dm} ;$$

$$S = \frac{b \cdot h_b}{2} = \frac{\dots}{2} = \dots \text{ dm}^2 \quad \left| \quad h_a = \frac{2 \cdot S}{a} = \frac{2 \cdot \dots}{\dots} = \dots \text{ cm} = \dots \text{ dm} ; b = \frac{2 \cdot S}{h_b} = \frac{2 \cdot \dots}{\dots} = \dots \text{ cm}$$

4. Намерете в сантиметри обиколката на триъгълника  $ABC$  с лице  $3150 \text{ mm}^2$  и височини  $h_a = 42 \text{ mm}$ ,  $h_b = 63 \text{ mm}$  и  $h_c = 8,4 \text{ cm}$ .

Решение.

$$S = \frac{a \cdot h_a}{2} ; 2 \cdot S = a \cdot h_a ; a = \frac{2 \cdot S}{h_a} ; \text{ Със същите разсъждения: } b = \frac{2 \cdot S}{h_b} ; c = \frac{2 \cdot S}{h_c} ;$$

$$a = \frac{2 \cdot \dots}{\dots} = \dots \text{ mm} ;$$

$$b = \frac{2 \cdot \dots}{\dots} = \dots \text{ mm} ;$$

$$h_c = 8,4 \text{ cm} = \dots \text{ mm} ; c = \frac{2 \cdot \dots}{\dots} = \dots \text{ mm} ;$$

$$P = \dots + \dots + \dots = \dots \text{ mm} = \dots \text{ cm}$$