

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

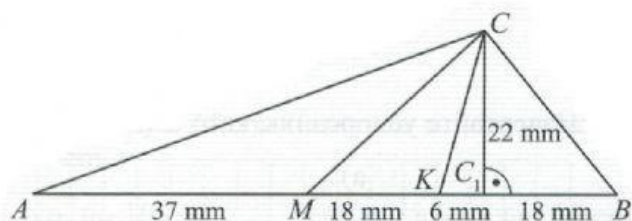
Решение.

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

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

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

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



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

$$S_{ABC} = \frac{\cdot}{2} = \cdot = \text{mm}^2$$

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

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

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

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 ²	256 mm ²	1785 cm ²	dm ²

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

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

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

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

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

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

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

Решение.

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

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

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

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

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