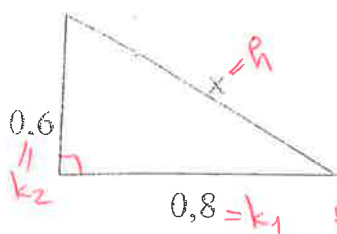
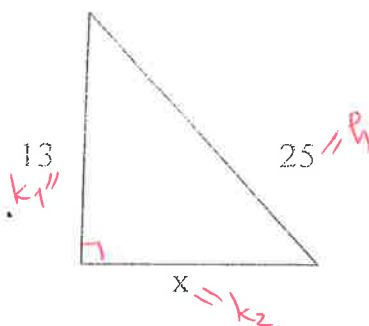


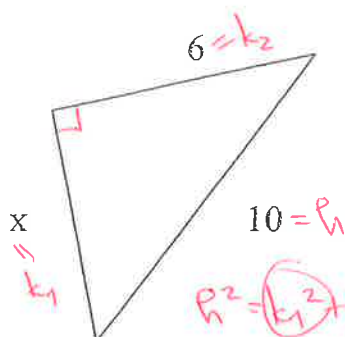
1. Izračunaj neznano stranico.



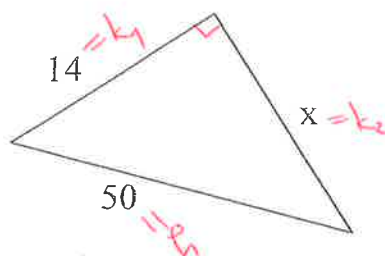
$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ h^2 &= 0.8^2 + 0.6^2 \\ h^2 &= 0.64 + 0.36 \\ h^2 &= 1 \quad / \sqrt{} \\ \sqrt{h^2} &= \sqrt{1} \\ h &= 1 \end{aligned}$$



$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ k_2^2 &= h^2 - k_1^2 \\ k_2^2 &= 25^2 - 13^2 \\ k_2^2 &= 625 - 169 \\ k_2^2 &= 456 \quad / \sqrt{} \\ \sqrt{k_2^2} &= \sqrt{456} \\ \text{DELNO KORENENJE} \quad k_2 &= \sqrt{4 \cdot 114} \\ k_2 &= 2\sqrt{114} \end{aligned}$$

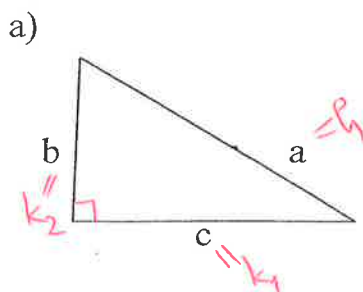


$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ k_1^2 &= h^2 - k_2^2 \\ k_1^2 &= 10^2 - 6^2 \\ k_1^2 &= 100 - 36 \\ k_1^2 &= 64 \quad / \sqrt{} \\ \sqrt{k_1^2} &= \sqrt{64} \rightarrow k_1 = 8 \end{aligned}$$

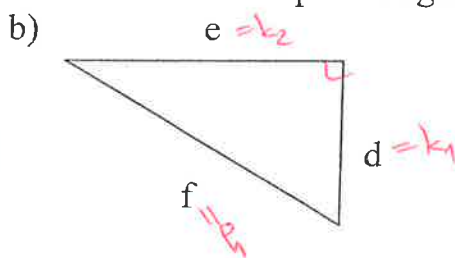


$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ k_2^2 &= h^2 - k_1^2 \\ k_2^2 &= 50^2 - 14^2 \\ k_2^2 &= 2500 - 196 \\ k_2^2 &= 2304 \quad / \sqrt{} \\ \sqrt{k_2^2} &= \sqrt{2304} \\ k_2 &= 48 \end{aligned}$$

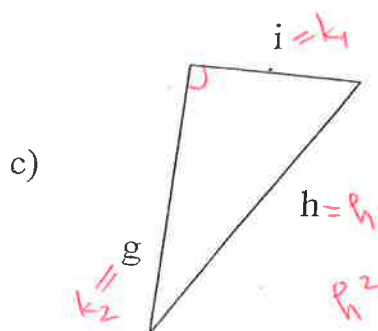
2. V narisanih trikotnikih poišči hipotenuze in katete ter zapiši Pitagorove izreke.



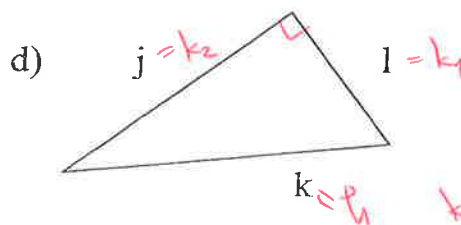
$$a^2 = b^2 + c^2$$



$$f^2 = e^2 + d^2$$



$$h^2 = g^2 + i^2$$



$$k^2 = j^2 + l^2$$

3. V pravokotnem trikotniku sta dani kateti. Izračunaj hipotenuzo:

a) $a = 18 \text{ cm}$

$b = 24 \text{ cm}$

$c = ?$

$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ h^2 &= 18^2 + 24^2 \\ h^2 &= 324 + 576 \\ h^2 &= 900 \quad / \sqrt{} \\ \sqrt{h^2} &= \sqrt{900} \\ h &= 30 \text{ cm} \end{aligned}$$

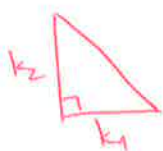
b) $a = 13 \text{ dm}$

$b = 84 \text{ dm}$

$c = ?$

$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ h^2 &= 13^2 + 84^2 \\ h^2 &= 169 + 7056 \\ h^2 &= 7225 \quad / \sqrt{} \\ \sqrt{h^2} &= \sqrt{7225} \\ h &= 85 \text{ dm} \end{aligned}$$

4. V pravokotnem trikotniku merita kateti 48 dm in 64 dm. Izračunaj dolžino hipotenuze, ploščino in obseg tega trikotnika. Skica!



$k_1 = 48 \text{ dm}$

$k_2 = 64 \text{ dm}$

$h =$

$P =$

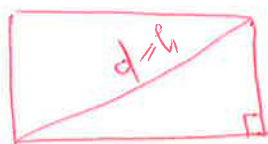
$\sigma =$

$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ h^2 &= 48^2 + 64^2 \\ h^2 &= 2304 + 4096 \\ h^2 &= 6400 \quad / \sqrt{} \\ \sqrt{h^2} &= \sqrt{6400} \\ h &= 80 \text{ dm} \end{aligned}$$

$$\begin{aligned} \sigma &= k_1 + k_2 + h \\ \sigma &= 48 + 64 + 80 \\ \sigma &= 192 \text{ dm} \end{aligned}$$

$$\begin{aligned} P &= \frac{k_1 \cdot k_2}{2} \\ P &= \frac{48 \cdot 64 \cdot 32}{2 \cdot 1} \\ P &= 1536 \text{ dm}^2 \end{aligned}$$

5. Načrtaj pravokotnik s stranicama 4 cm in 3 cm. Izračunaj dolžino diagonale in njegov obseg ter ploščino.



$a = 4 \text{ cm}$

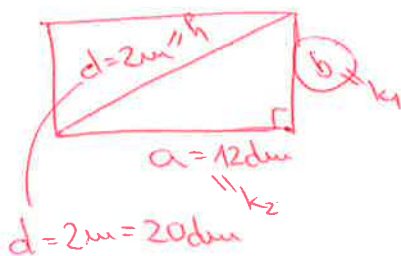
$b = 3 \text{ cm}$

$$\begin{aligned} d^2 &= a^2 + b^2 \\ d^2 &= 4^2 + 3^2 \\ d^2 &= 16 + 9 \\ d^2 &= 25 \quad / \sqrt{} \\ \sqrt{d^2} &= \sqrt{25} \\ d &= 5 \text{ cm} \end{aligned}$$

$$\begin{aligned} \sigma &= 2 \cdot a + 2 \cdot b \\ \sigma &= 2 \cdot 4 + 2 \cdot 3 \\ \sigma &= 8 + 6 \\ \sigma &= 14 \text{ cm} \end{aligned}$$

$$\begin{aligned} P &= a \cdot b \\ P &= 4 \cdot 3 \\ P &= 12 \text{ cm}^2 \end{aligned}$$

6. V pravokotniku meri diagonala 2m in dolžina 12 dm. Izračunaj širino, ploščino in obseg tega pravokotnika. Skica!



$a = 12 \text{ dm}$

$b = ?$

$d = 2 \text{ m} = 20 \text{ dm}$

$$\begin{aligned} h^2 &= k_1^2 + k_2^2 \\ k_1^2 &= h^2 - k_2^2 \\ k_1^2 &= 20^2 - 12^2 \\ k_1^2 &= 400 - 144 \\ k_1^2 &= 256 \quad / \sqrt{} \\ \sqrt{k_1^2} &= \sqrt{256} \\ k_1 &= 16 \text{ dm} \end{aligned}$$

$$\begin{aligned} P &= a \cdot b \\ P &= 12 \cdot 16 \\ P &= 192 \text{ dm}^2 \end{aligned}$$

$$\begin{aligned} \sigma &= 2 \cdot a + 2 \cdot b \\ \sigma &= 2 \cdot 12 + 2 \cdot 16 \\ \sigma &= 24 + 32 \\ \sigma &= 56 \text{ dm} \end{aligned}$$