

1. Určete hodnotu goniometrické funkce, zaokrouhlete na **4 desetinná místa**:

$\sin 48^\circ$	$\cos 56^\circ$	$\operatorname{tg} 41^\circ$	$\sin 30^\circ$	$\operatorname{tg} 74^\circ$

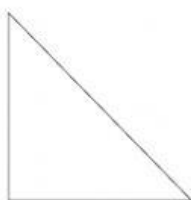
2. Urči z tabulek velikosti úhlu, pro který platí: (**Zaokrouhlete na celé stupně**)

- a) $\sin \alpha = 0,9890$ $\alpha = \underline{\hspace{1cm}}^\circ$
 b) $\cos \alpha = 0,9483$ $\alpha = \underline{\hspace{1cm}}^\circ$
 c) $\operatorname{tg} \alpha = 4,056$ $\alpha = \underline{\hspace{1cm}}^\circ$

3. V trojúhelníku vypočítej velikosti zbývajících stran a úhlů:

Délky stran zaokrouhlete na jedno desetinné místo, celé stupně.

- a) $\triangle ABC$: $\alpha = 90^\circ$ $a = 15 \text{ cm}$ $\beta = 36^\circ$

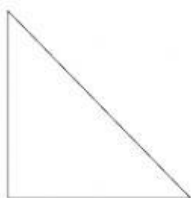


$$b = \underline{\hspace{1cm}} \text{ cm}$$

$$c = \underline{\hspace{1cm}} \text{ cm}$$

$$\gamma = \underline{\hspace{1cm}}^\circ$$

- b) $\triangle ABC$: $\beta = 90^\circ$ $b = 17 \text{ cm}$ $\alpha = 52^\circ$

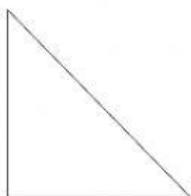


$$a = \underline{\hspace{1cm}} \text{ cm}$$

$$c = \underline{\hspace{1cm}} \text{ cm}$$

$$\gamma = \underline{\hspace{1cm}}^\circ$$

- c) $\triangle KLM$: $\kappa = 90^\circ$ $k = 24 \text{ cm}$ $\mu = 52^\circ$

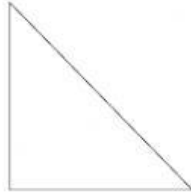


$$l = \underline{\hspace{1cm}} \text{ cm}$$

$$m = \underline{\hspace{1cm}} \text{ cm}$$

$$\lambda = \underline{\hspace{1cm}}^\circ$$

d) $\triangle ABC : \alpha = 90^\circ \ b = 8 \text{ cm} \ \beta = 27^\circ$

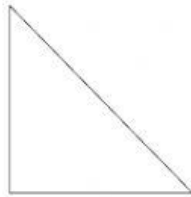


$$a = __\text{cm}$$

$$c = __\text{cm}$$

$$\gamma = __\circ$$

e) $\triangle ABC : \gamma = 90^\circ \ a = 9 \text{ cm} \ \alpha = 61^\circ$

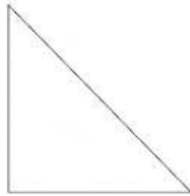


$$b = __\text{cm}$$

$$c = __\text{cm}$$

$$\beta = __\circ$$

f) $\triangle DEF : \delta = 90^\circ \ e = 32 \text{ cm} \ \varphi = 9^\circ$

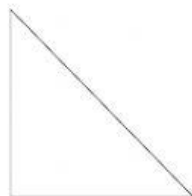


$$f = __\text{cm}$$

$$d = __\text{cm}$$

$$\varepsilon = __\circ$$

g) $\triangle ABC : \beta = 90^\circ \ a = 7 \text{ cm} \ c = 8 \text{ cm}$

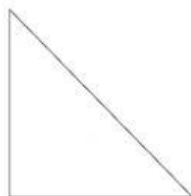


$$b = __\text{cm}$$

$$\alpha = __\circ$$

$$\gamma = __\circ$$

h) $\triangle DEF : \varphi = 90^\circ \ d = 5 \text{ cm} \ f = 9 \text{ cm}$



$$e = __\text{cm}$$

$$\varepsilon = __\circ$$

$$\delta = __\circ$$