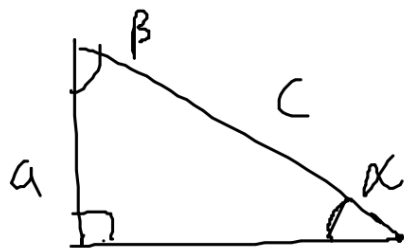


Suorak. kolmio



$$\alpha + \beta = 90^\circ$$

Pythagoras :

b

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

- ainoa menetelmä jolla voit tarkastaa onko kolmio suorak.

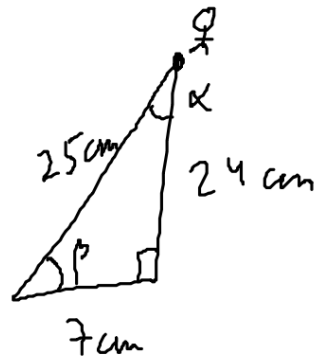
Trigon. funktiot :

$$\sin \alpha = \frac{a}{c} \rightarrow \alpha = \sin^{-1}\left(\frac{a}{c}\right)$$

$$\cos \alpha = \frac{b}{c} \rightarrow \alpha = \cos^{-1}\left(\frac{b}{c}\right)$$

$$\tan \alpha = \frac{a}{b} \rightarrow \alpha = \tan^{-1}\left(\frac{a}{b}\right)$$

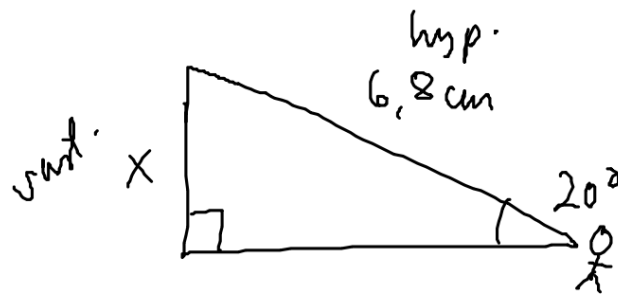
166. a)



$$\tan \alpha = \frac{7 \text{ cm}}{24 \text{ cm}} = \frac{7}{24}$$

$$\approx 0,292$$

168. a)



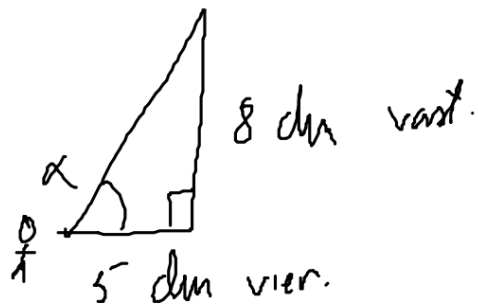
$$\sin 20^\circ = \frac{x}{6,8}$$

$$\frac{0,3420}{1} = \frac{x}{6,8}$$

V: n. 2,3 cm

$$x = 6,8 \cdot 0,3420 \approx 2,33$$

169. a)



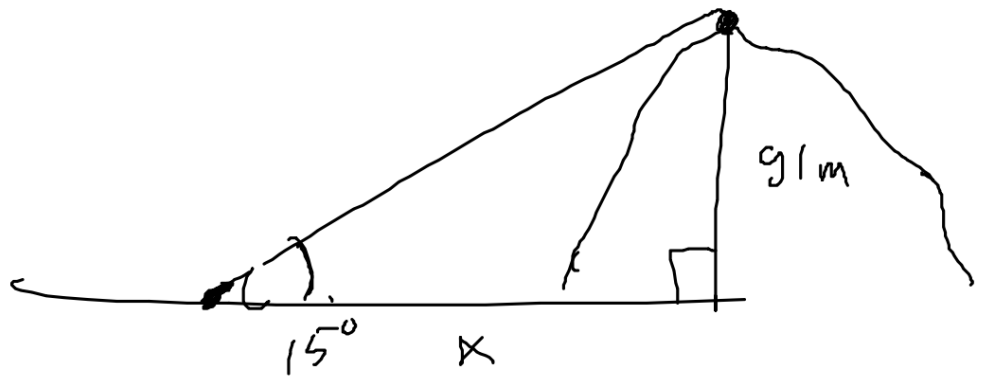
$$\tan \alpha = \frac{8}{5}$$

$$\alpha = \tan^{-1} \left(\frac{8}{5} \right) \approx 57.995^\circ$$

↑
shift / 2nd F

V: h. 58°

178.



$$\tan 15^\circ = \frac{91}{x}$$

$$\underline{0,26795} = \frac{91}{x}$$

V: u. 390 m

$$0,26795x = 91 \quad || : 0,26795$$

$$x = 339,62$$