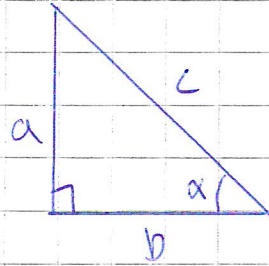
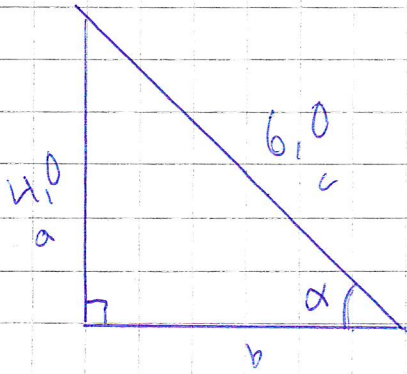


# Kulman ratkaiseminen s. 61

$$\sin \alpha = \frac{a}{c}$$

$$\cos \alpha = \frac{b}{c}$$

$$\tan \alpha = \frac{a}{b}$$



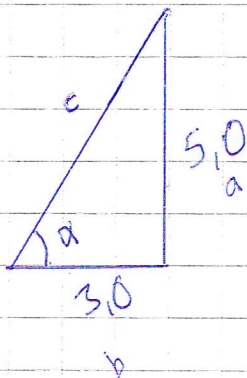
Kuinka suuri on kulma  $\alpha$ ?

$$\sin \alpha = \frac{4,0}{6,0}$$

Laskin:  
Shift + sin

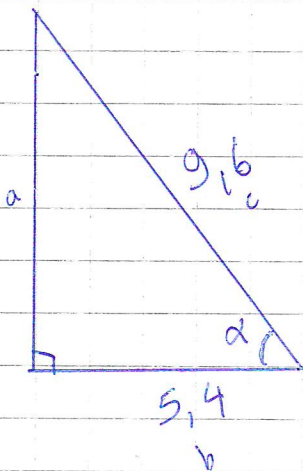
$$\alpha = \arcsin\left(\frac{4,0}{6,0}\right) = 41,81...^\circ \approx 42^\circ$$

$$\arcsin = \sin^{-1}$$



$$\tan \alpha = \frac{5,0}{3,0}$$

$$\alpha = \arctan\left(\frac{5,0}{3,0}\right) = 59,036...^\circ \approx 59^\circ$$



$$\cos \alpha = \frac{5,4}{9,6}$$

$$\alpha = \arccos\left(\frac{5,4}{9,6}\right) = 55,77...^\circ \approx 56^\circ$$

s. 62 t. 236, 237, 238, 239

Vastaukset: s. 72

Kohtienävät: 249, 250  
s. 63

Vastaukset  
237  
a) ~~67~~<sup>67</sup>  
b) 56°