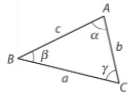
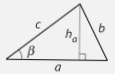
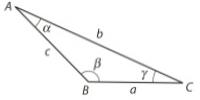
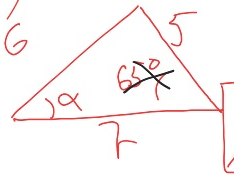
kulmien summa	$\alpha + \beta + \gamma = 180°$	
pinta-ala	$A = \frac{1}{2}ah_a = \frac{1}{2}ac\sin\beta = 2R^2\sin\alpha\sin\beta\sin\gamma$	
sisään piirretyn ympyrän säde	$r = \frac{2A}{a+b+c}$	
ympäri piirretyn ympyrän säde	$R = \frac{abc}{4A} = \frac{bc}{2h_a} = \frac{a}{2\sin\alpha} = \frac{b}{2\sin\beta} = \frac{c}{2\sin\gamma}$	
Sinilause	$\frac{a}{\sin\alpha} = \frac{b}{\sin\beta} = \frac{c}{\sin\gamma} = 2R$	
Kosinilause (laajennettu Pythagoraan lause)	$a^2 = b^2 + c^2 - 2bc\cos\alpha$	

Esim. Ratkaise kulma α

a)



Sinilauseella:

$$\frac{a}{\sin\alpha} = \frac{b}{\sin\beta}$$

$$\frac{6}{\sin 65^\circ} = \frac{5}{\sin\alpha}$$

$$\sin\alpha = \frac{5\cdot\sin 65^\circ}{6}$$

$$\alpha = \arcsin\left(\frac{5\cdot\sin 65^\circ}{6}\right) = 49^\circ$$

b) Kosinilauseella:

$$c^2 = a^2 + b^2 - 2ab\cos\gamma$$

$$5^2 = 6^2 + 7^2 - 2\cdot 6\cdot 7\cdot\cos\alpha$$

$$25 - 36 - 49 = -84\cdot\cos\alpha \quad |:(-84)$$

$$\cos\alpha = \frac{-60}{-84}$$

$$\alpha = \arccos\left(\frac{60}{84}\right) = 44{,}4^\circ$$