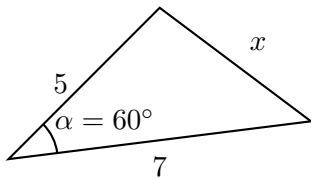


- (b) (2 marks) Use the Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos \alpha$ to calculate the value of x for the following triangle:



Solution:

$$\begin{aligned}x^2 &= 5^2 + 7^2 - 2 \cdot 5 \cdot 7 \cos 60 \\&= 25 + 49 - 70/2 = 39\end{aligned}$$

and therefore $x = \sqrt{39} = 6.24$.