ASSIGNMENT-4

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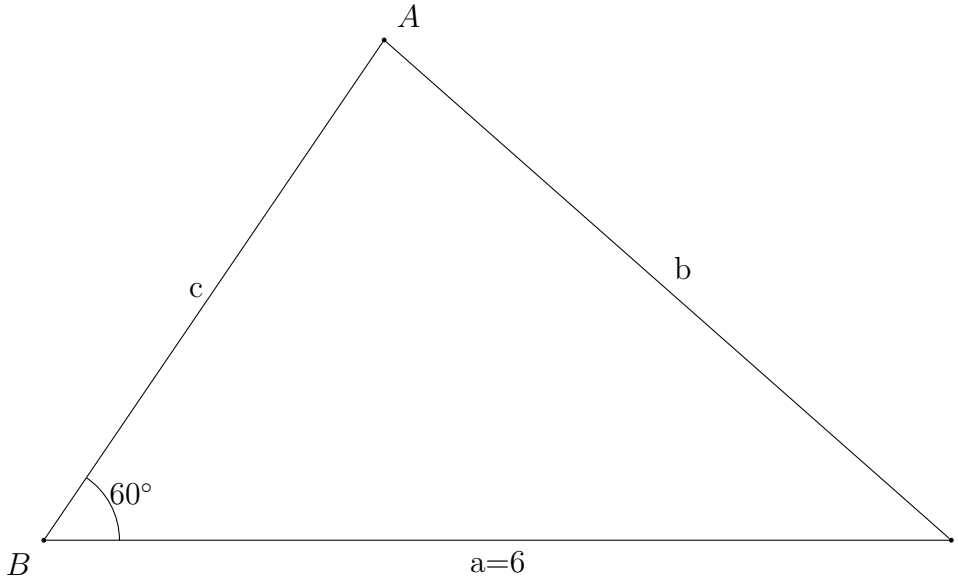
1 Question:-

In ΔABC, a=6 ,$\angle$B = 60° and b-c=2. sketch the triangle.

2 Solution:-

Given, a=6 , $\angle$B = 60° and b-c=2.



Now we know that,
Using law of cosines

$$\cos B = \frac{b^2 + a^2 - c^2}{2ac}$$

Therefore,cos60°=

$$\frac{b^2 + 36 - c^2}{2(6)c}$$

6c=c^2+36-4-c^2-4c
6c+4c=32

c=3.2,b=c+2=5.2

2.1 Output of Python code:-

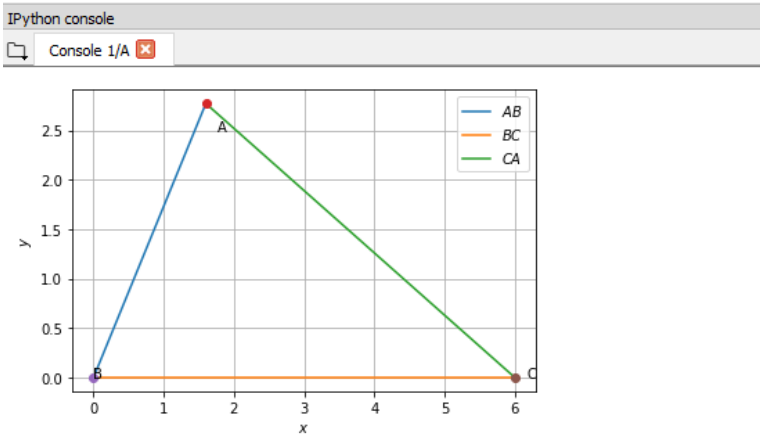


Figure 1: Fig generated using python