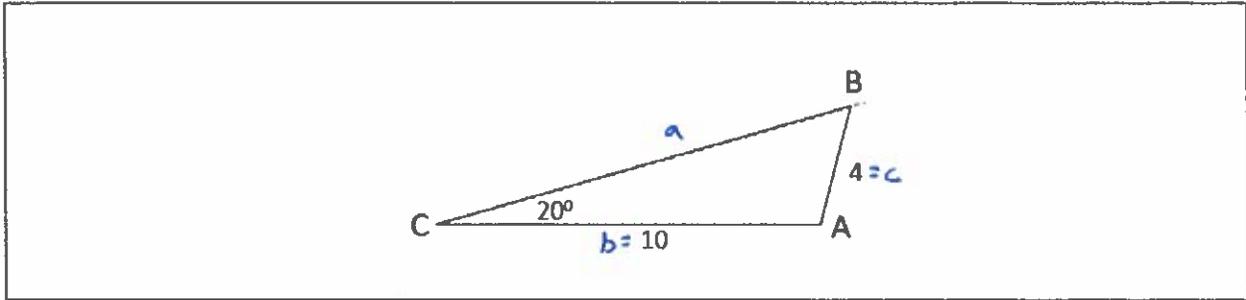


L52 - EQ - Trigonometry Review

Use the following information to answer Q1:



Q1: Determine the value of $\angle B$. (2 marks)

$$\frac{\sin B}{b} = \frac{\sin C}{c}$$

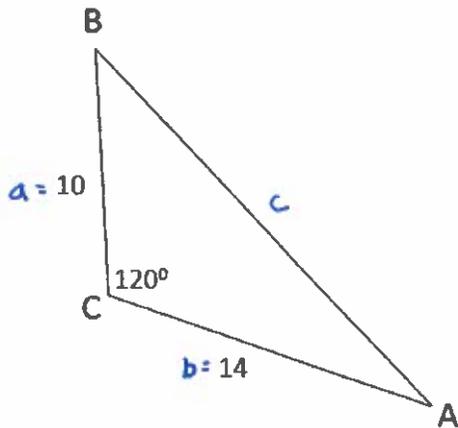
$$\frac{\sin B}{10} = \frac{\sin 20}{4}$$

$$\sin B = 0.855$$

$$\angle B = \sin^{-1}(0.855)$$

$$\angle B = 58.8^\circ$$

Q2: Solve the triangle. (3 marks)



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

$$c^2 = 10^2 + 14^2 - 2(10)(14) \cos 120^\circ$$

$$c^2 = 100 + 196 + 140$$

$$c^2 = 436$$

$$c = 20.9$$

$$\frac{\sin A}{a} = \frac{\sin C}{c}$$

$$\frac{\sin A}{10} = \frac{\sin 120}{20.9}$$

$$\angle A = 24.5^\circ$$

$$\angle A + \angle B + \angle C = 180^\circ$$

$$\angle B = 35.5^\circ$$

MARKING:

Beginning	0.0 – 2.0
Progressing	2.5 – 3.5
Competent	4.0 – 4.5
Exemplary	5.0