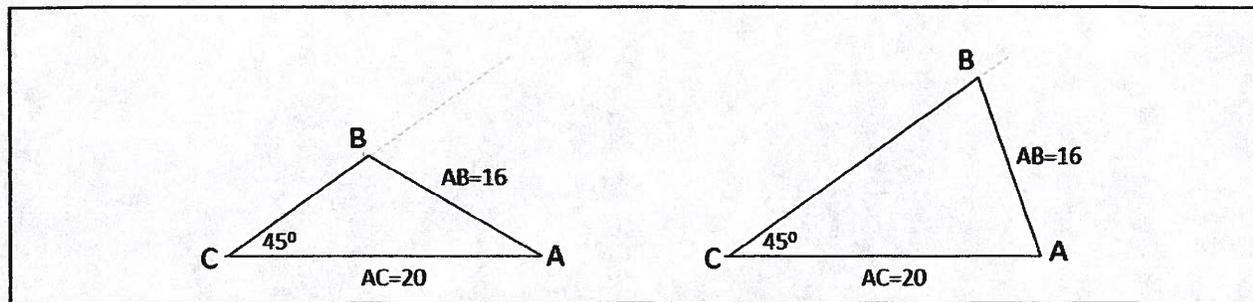


51 - EQ - 2.3 The Sine Law

Use the following information to answer Q1:

Q1: Determine the two possible values of $\angle B$.Angle - Side - Side means Ambiguous Case

$$\frac{\sin B}{b} = \frac{\sin C}{c} \quad \frac{1}{2} \text{ mark}$$

$$\frac{\sin B}{20} = \frac{\sin 45}{16}$$

$$\frac{\sin B}{20} = \frac{0.707}{16}$$

$$\sin B = 0.883... \quad \frac{1}{2} \text{ mark}$$

$$\angle B = \sin^{-1}(0.883...)$$

$$\angle B = 62.1^\circ \quad \text{or} \quad 180 - 62.1^\circ = 117.9^\circ$$

$$\angle B = 62.1^\circ$$

1 mark

$$\angle B = 117.9^\circ$$

1 mark

MARKING:

Beginning	0.0 – 1.0
Progressing	1.5 – 2.0
Competent	2.5
Exemplary	3.0