a) Correctly write the sine **LAW** in one of the two forms.
b) Use the sine law to solve a non-right triangle.

MCF 3MI   5.3 Applying the Sine **LAW** in Acute Triangles

Date: _____

The Sine **Law** can be used with any triangle, even if it is not a right triangle.
Given <u>any</u> triangle,
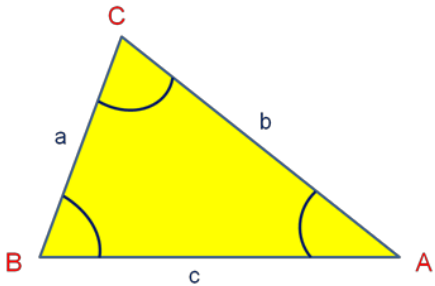
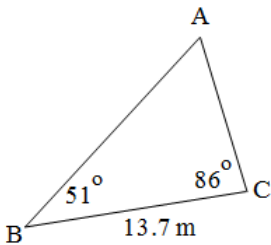① $$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

and

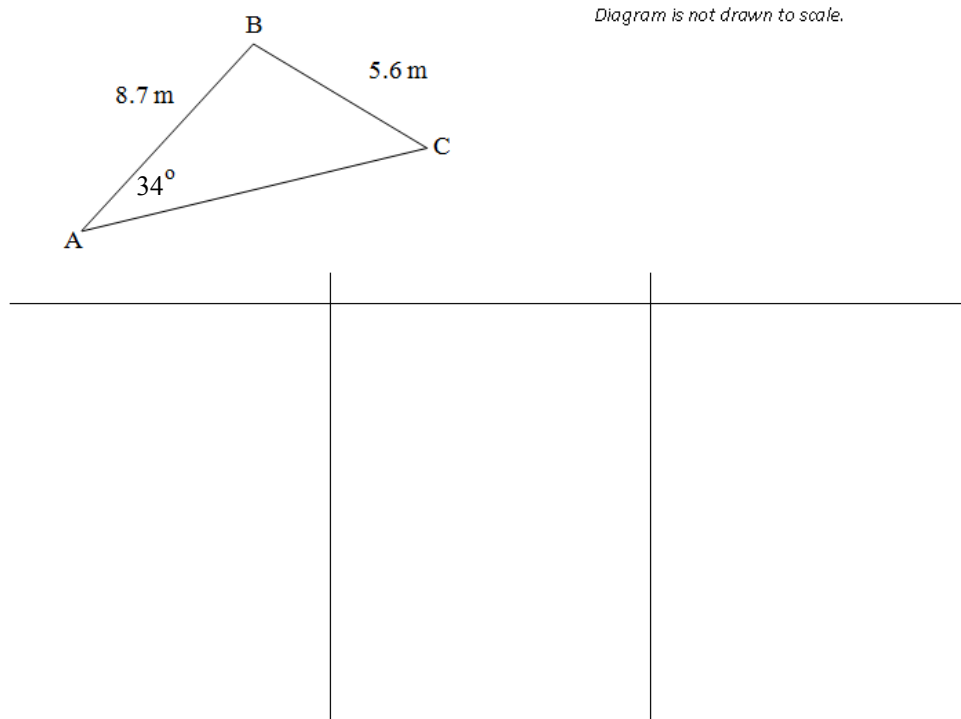② $$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

If you are trying to determine an unknown <u>side</u>, then use the formula given in ①.

If you are trying to determine an unknown angle, then use the formula given in ②.

Ex. 1: **Solve** the triangle. (Round side lengths and angles to <u>**one**</u> decimal place.)

Ex. 2: **Solve** the triangle. (Round side lengths and angles to **one** decimal place.)

Diagram is not drawn to scale.

B

5.6 m

8.7 m

C

34°

A