

Law of Sines – Finding lengths

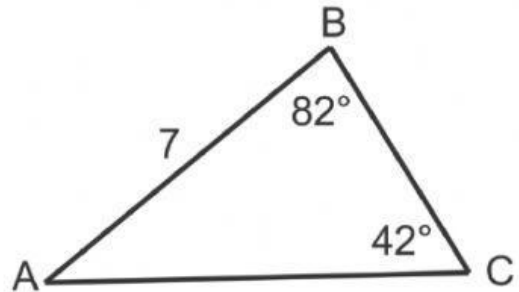
Round your answers to **1 dp**.

1. Find the length AC

a) What type of triangle is this?

AAS

ASA



b) Put the steps in order

STEP 1:

$$AC = \frac{7 \sin(82)}{\sin(42)}$$

$$\frac{AC}{\sin(82)} = \frac{7}{\sin(42)}$$

STEP 2:

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

$$AC = 10.35926 \dots$$

STEP 3:

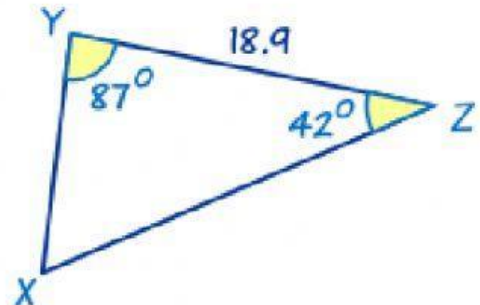
STEP 4:

STEP 5: $AC =$

2. Find the length XZ

a) What is $m\angle X$?

b) Put the steps in order



STEP 1:

$$\frac{y}{\sin Y} = \frac{x}{\sin(X)}$$

$$XZ = \frac{18.9 \sin(87)}{\sin(51)}$$

STEP 2:

STEP 3:

$$\frac{XZ}{\sin(87)} = \frac{18.9}{\sin(51)}$$

STEP 4: $XZ =$