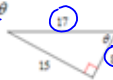


Starter 5.3

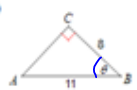
Find the area of each triangle to the nearest tenth.

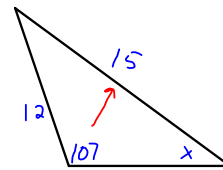
1) In $\triangle CAB$, $m\angle C = 108^\circ$, $b = 10.8$ in, $a = 12$ in
 $.5 \cdot 10.8 \cdot 12 \sin 108 = 61.6 \text{ in}^2$

Find the value of the trig function indicated.

2) $\cos \theta$

 $\cos^{-1}(8/11) = 61.9^\circ$

Find the measure of each angle indicated. Round to the nearest tenth.

3)

 $\cos^{-1}(8/11)$
 43.3°

5.3 Solving Non-Right Δ 's

Law of Sines

$$\frac{\sin A}{a} = \frac{\sin B}{b}$$

$$\frac{\sin 107}{15} = \frac{\sin x}{12}$$

$$\frac{12 \sin 107}{15} = \sin x$$

$$49.9^\circ$$

$$\frac{\sin 83}{x} = \frac{\sin 40}{5}$$

$$5 \sin 83 = x \sin 40$$

$$\frac{5 \sin 83}{\sin 40} = x$$

$$x = 7.7$$

