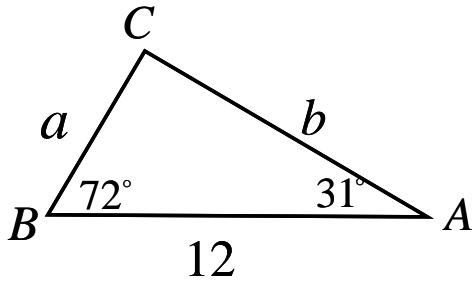


**Law of Sines (6.1)**

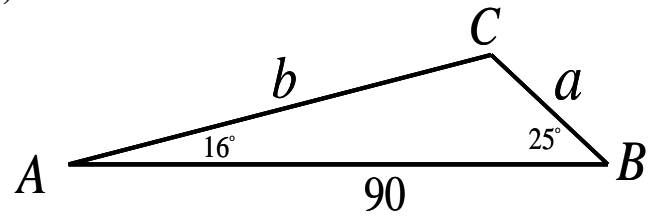
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

**Solving Triangles (ASA):** Solve each triangle. Round lengths of sides to the nearest tenth and angle measures to the nearest degree.

1)



2)



**Solving Triangles (SSA):** Determine whether the given measurements produce one triangle, two triangles, or no triangle at all. Solve each triangle that results. Round to the nearest tenth and the nearest degree for sides and angles, respectively.

3)  $a = 10, b = 30, A = 150^\circ$ 4)  $a = 7, b = 28, A = 12^\circ$

### Area of an Oblique Triangle

$$\text{Area} = \frac{1}{2}bc \sin A = \frac{1}{2}ab \sin C = \frac{1}{2}ac \sin B$$

**Finding the Area of an Oblique Triangle:** Find the area of the triangle having the given measurements. Round to the nearest square unit.

5)  $A = 22^\circ$ ,  $b = 20$  feet,  $c = 50$  feet

6)  $C = 131^\circ$ ,  $a = 9$  yards,  $b = 7$  yards

**Real World Applications:** Solve. Round to the nearest mile.

7) There are two radio stations in the city, A and B. Station B is 40 miles east of station A. Station A gives out a signal at a bearing of  $N48^\circ E$  to a car radio. Station B gives out a signal at a bearing of  $N34^\circ W$  to the same car radio. How far is the car radio from Station A?