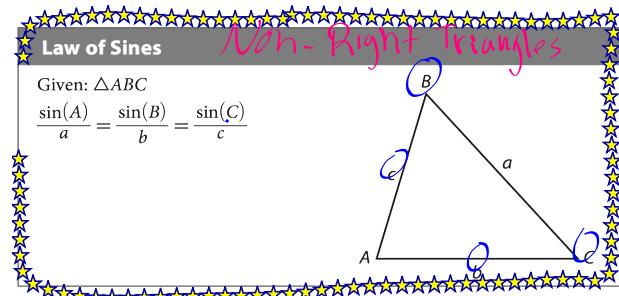


## 8-1 Law of Sines

## Objectives:

-I can find missing sides of a non-right triangle using the Law of Sines.

## Law of Sines



Feb 24-12:40 PM

Feb 25-7:57 AM

Solve the triangle

$$180^\circ - 28^\circ - 42^\circ = A$$

Diagram of triangle ABC with angles 28° at B, 42° at C, and 110° at A. Side AB is labeled 16.3, side BC is labeled 8, and side CA is labeled 11.7.

$$\frac{\sin 28^\circ}{8} = \frac{\sin 42^\circ}{c}$$

$$\frac{5.4}{46} = \frac{16c}{46}$$

$$c = 11.7$$

$$\frac{\sin 110^\circ}{a} = \frac{\sin 28^\circ}{8}$$

$$\frac{7.5}{46} = \frac{16a}{46}$$

$$a = 16.3$$

Solve the triangle  
Find a.

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

Diagram of triangle ABC with angles 38° at A, 27° at B, and 180° - 38° - 27° = 115° at C. Side AC is labeled 16, and side BC is labeled (a).

$$\frac{\sin 38^\circ}{16} = \frac{\sin 27^\circ}{a}$$

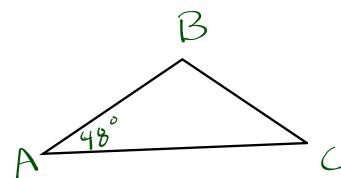
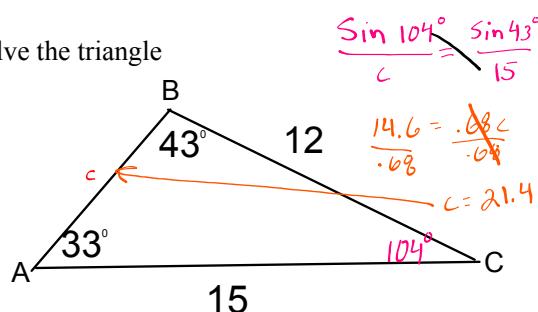
$$\frac{9.9}{45} = \frac{16a}{45}$$

$$a = 21.7$$

Feb 25-7:59 AM

Feb 1-10:37 AM

Solve the triangle



Feb 25-8:04 AM

Feb 25-9:16 AM

Feb 22-8:35 AM