8-1 Law of Sines

Objectives:

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

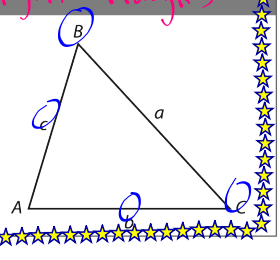
Feb 24-12:40 PM

Law of Sines

Law of Sines Non-Right Triangles

Given: $\triangle ABC$

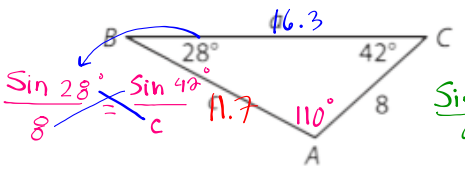
$$\frac{\sin(A)}{a} = \frac{\sin(B)}{b} = \frac{\sin(C)}{c}$$



Feb 25-7:57 AM

Solve the triangle

$180° - 28° - 42° = A$



$\frac{\sin 28°}{8} = \frac{\sin 42°}{c}$

$\frac{\sin 110°}{a} = \frac{\sin 28°}{8}$

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

$c = 11.7$

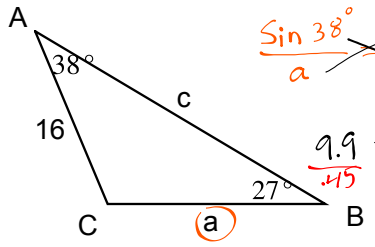
$\frac{7.5}{.46} = \frac{.46a}{.46}$

$a = 16.3$

Feb 25-7:59 AM

~~Solve the triangle~~ Find a.

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



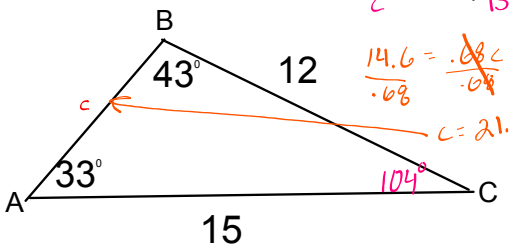
$\frac{\sin 38°}{a} = \frac{\sin 27°}{16}$

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

$a = 21.7$

Feb 1-10:37 AM

Solve the triangle

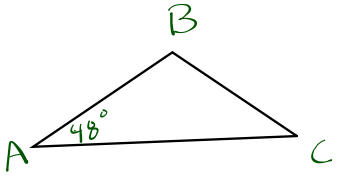


$\frac{\sin 104°}{c} = \frac{\sin 43°}{15}$

$\frac{14.6}{.68} = \frac{.68c}{.68}$

$c = 21.4$

Feb 25-8:04 AM



Feb 25-9:16 AM

Feb 22-8:35 AM