

Starter: Solve each equation for x. Round to the nearest tenth.

Hint: Cross multiply and use a calculator

$$\frac{\sin(48^\circ)}{x} = \frac{\sin(42^\circ)}{12}$$

$$\frac{\sin(132^\circ)}{x} = \frac{\sin(23^\circ)}{6.7}$$

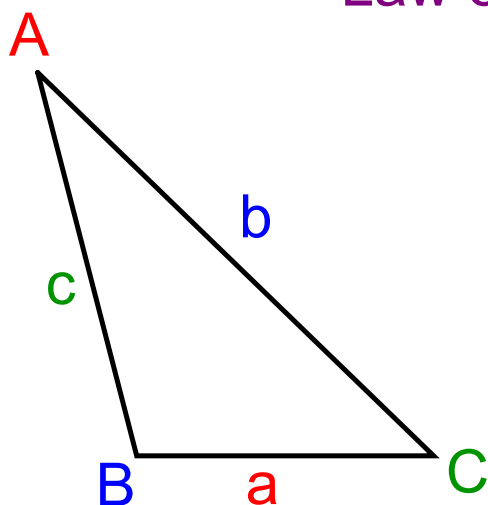
## 7-2 Law of Sines, Triangle Area

Objectives:

7-2a: I can solve a triangle using the Law of Sines.

7-2b: I can find the area of a triangle using trigonometric formulas.

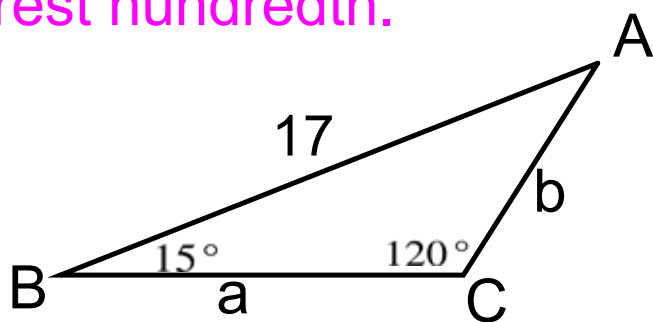
## Law of Sines



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

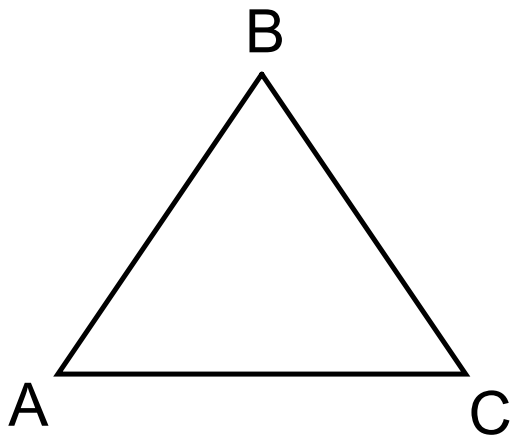
Solve the triangle:  
means find all 3 angles  
and all 3 sides.

Solve the triangle. Round to the nearest hundredth.



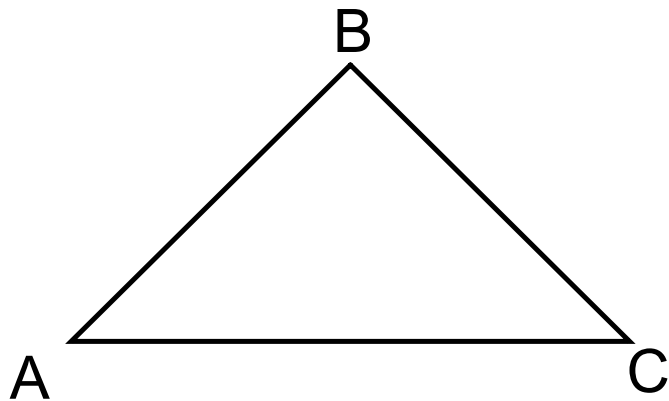
Solve the triangle. Round to the nearest tenth.

$$A = 50^\circ, B = 62^\circ, a = 4$$

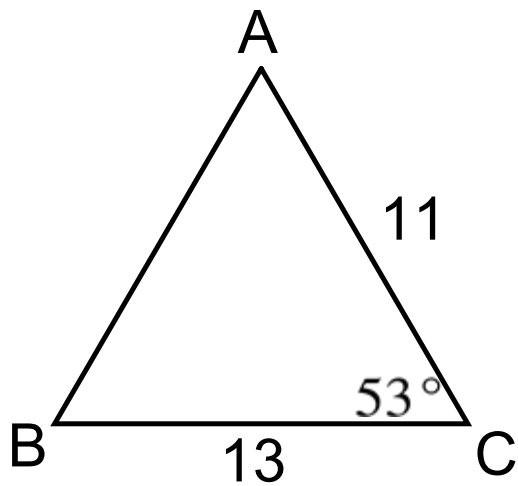


Solve the triangle. Round to the nearest tenth.

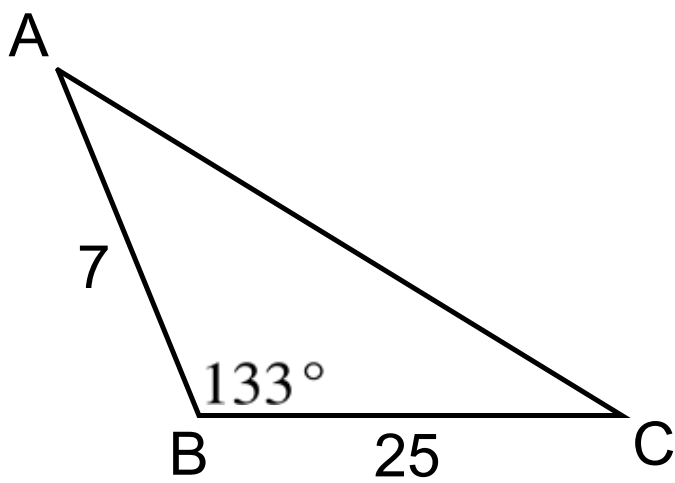
$$A = 49^\circ, a = 32, b = 28$$



Find the area of the given triangle. Round to the nearest tenth.



Find the area of the given triangle. Round to the nearest tenth.





## Attachments

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HW7-1 AK Graphing Trig.pdf

Quiz7.1 AK.pdf