Notes Law of Sines (sides)

Name: _____ Date: _____ Period: _____

Learning Target: _____

_____

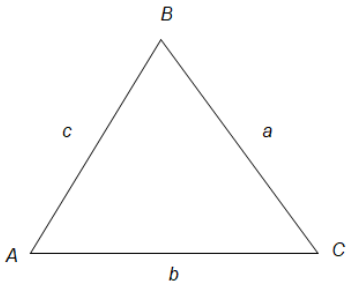
Law of sines works for all triangles (not just right ones)

To use law of sines you have to solve proportions To solve a proportion, cross multiply and divide

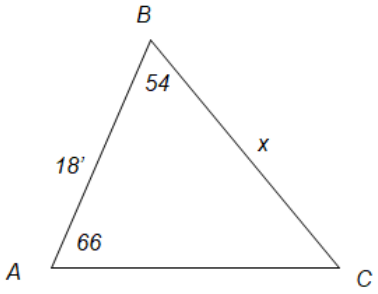
$$\frac{3}{4}=\frac{x}{8}$$

$$\frac{9}{4}=\frac{27}{x}$$

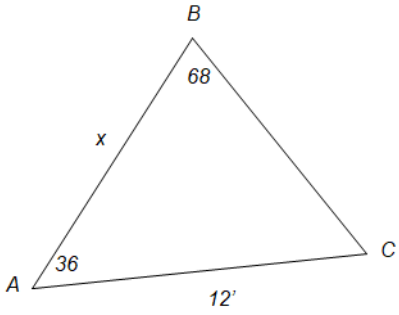
Law of Sines



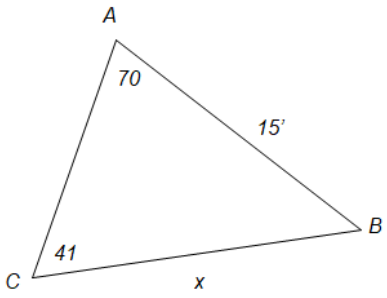
Example 1: Use law of sines to find x



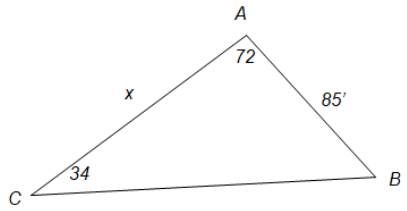
Example 2: Use law of sines to find x



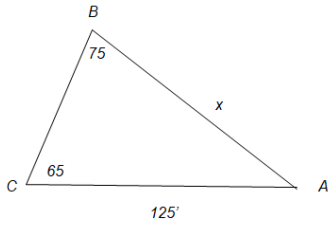
Example 3: Use law of sines to find x



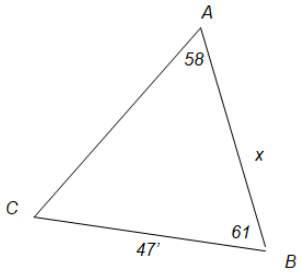
Example 4: Use law of sines to find x



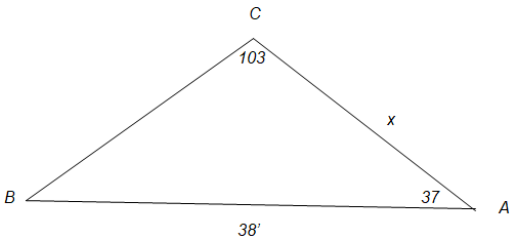
Practice 1: Use law of sines to find x



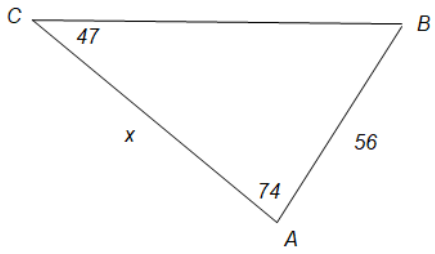
Practice 2: Use law of sines to find x



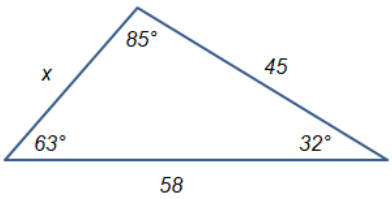
Practice 3: Use law of sines to find x



Practice 4: Use law of sines to find x



5. In the picture below there are 2 ways we can set up an equation to find x. What are the two ways?



- 1. Why is it necessary to use law of sines?
- 2. How many side and angles do we have to know to be able to use law of sines?
- 3. How do you decide which angle goes with which side?
- 4. How can we check our answer?