

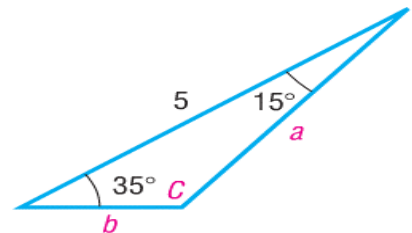
Name: _____

SHOW ALL YOUR WORK FOR EACH PROBLEM TO GET FULL CREDIT.
PLEASE BE NEAT.

Direction: Read through sections 7.1 and 7.2 in your book and answer the following questions.

1. True or False: The equation $\sin \theta = 2$ has a real solution that can be found using a calculator.
2. True or False: If $\sin(\theta) = \frac{1}{2}$, then the only possibility for θ is 30° .
3. a) What is the sum of the interior angles of a triangle?

b) Write Pythagorean Theorem for a right triangle?
4. Write the Laws of Sines and Cosines. Why does one need to use those laws to solve an oblique triangle, in other words, why we can't use the definition of trig functions to solve those triangles?
5. Solve the triangle: $A = 35^\circ$, $B = 15^\circ$, $c = 5$. (Section 7.1)



6. True or False: In a triangle, if we know the longest side, then the largest angle is opposite to that side.

7. True or False: If $\cos(\theta) < 0$, then we can conclude that θ is an obtuse angle if it is angle of a triangle.

8. For which of those triangles, ASA, SAA, SAS, SSA, and SSS, we need to start with Law of Cosine? What is the difference between SAS and SSA?