

## Trigonometry Basics

There are a few basic things about trigonometry that we need to keep in mind:

1. There are six parts to any triangle we'll be working with: 3 sides and 3 angles.
2. To figure out what all angles and sides are (if possible) we need to have at least half of the information. This means I have to have at least three measures given.
3. One of those three measures has to be a side.  
We must have the measure of at least one side in order to find the rest of the measures of a triangle. This is because there are an infinite number of triangles having congruent angles. (They are all *similar*!)
4. It is not possible to make a triangle out of any three measures given.  
Sometimes the third side or third angle is too large to accommodate the other two measures.
5. The Pythagorean Theorem *only works with right triangles*. Do not attempt to use it on oblique triangles.
6. SSA *still* does not guarantee a single solution!