## Solving trig problems with more than one right angle triangle

Tuesday, November 29, 2016

## Calculate the length of the side x. Answer will be to the nearest tenth.



What do we know??

- We know we are trying to solve for a side in triangle B
- Triangle B has a 39 degree angle given
- Side x is the hypotenuse

If we label the triangle it will make it much easier to determine our next step

After labeling, which trig ratio can we use to determine the unknown side?

The ratio must include a hypotenuse.

COSO: adj-hyp

Out of the two ratios, which one involves the second triangle?

Sin O= ppp. hyp.

Recall that we need to have two of the three quantities in order to solve for an unknown. Let's solve for the opposite side of triangle B using the information in triangle A

Solve for a side in triangle A

This side is = the opposite side in Triangle B



Cell phones are popular for texting and internet use. As you change locations the cell phone moves in and out of range of cell phone towers. In fact it is possible for multiple towers to pick up you cell signal. Given the information below, how far is tower 1 from tower 2.



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