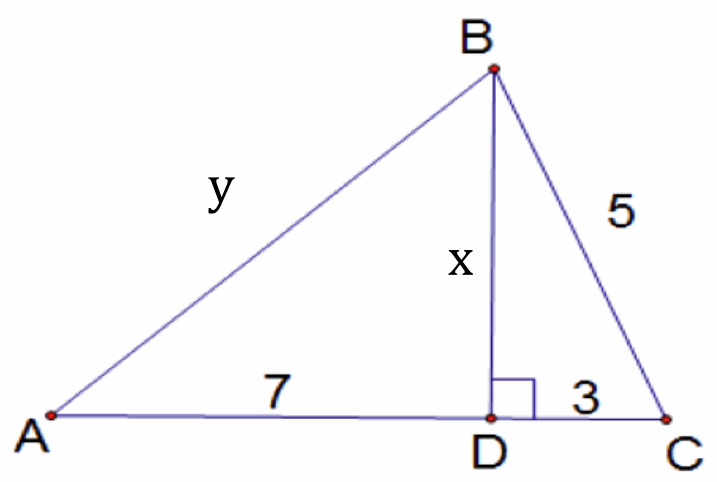
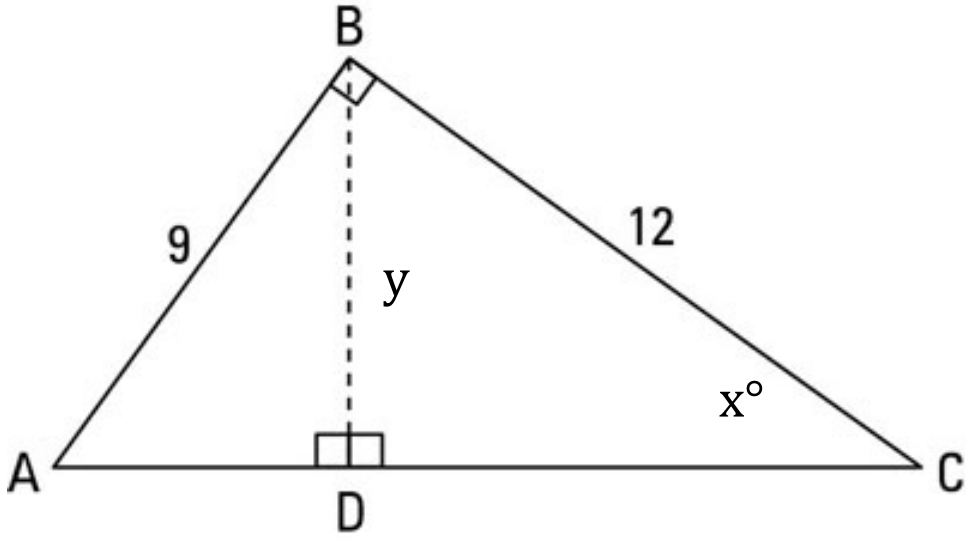
Station 1

Directions: Find the value of x, then y using Pythagorean Theorem, Special Right Triangles, or Trigonometry. Round to the nearest tenth.

1.



2.

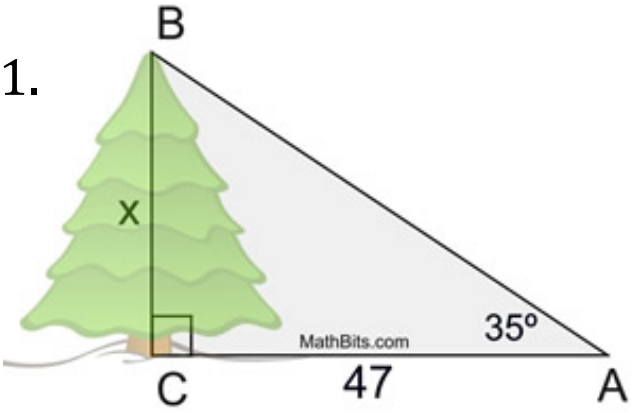


Hint
To find x, imagine the dotted line was missing.

Station 2

Directions: Find the missing values using trigonometry. Remember: SOH-CAH-TOA!!!!!!!!!!!!!! Round to the nearest hundreth.

1.



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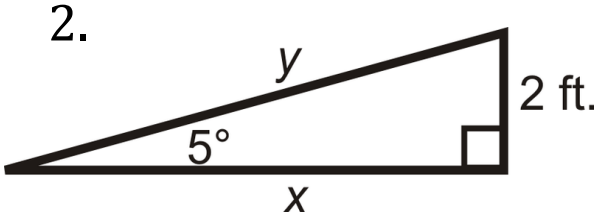

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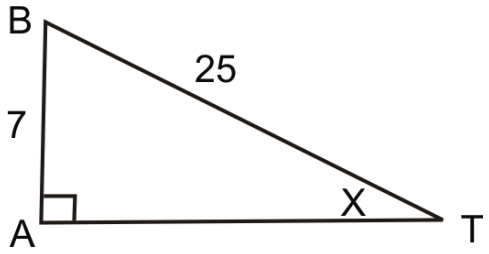

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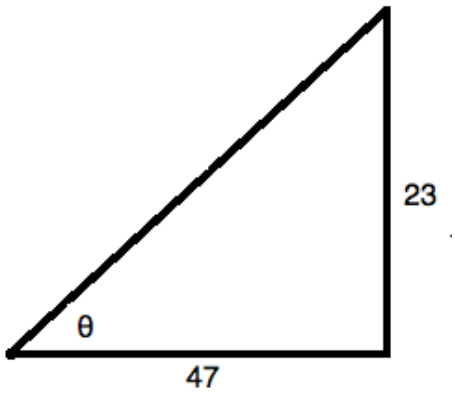
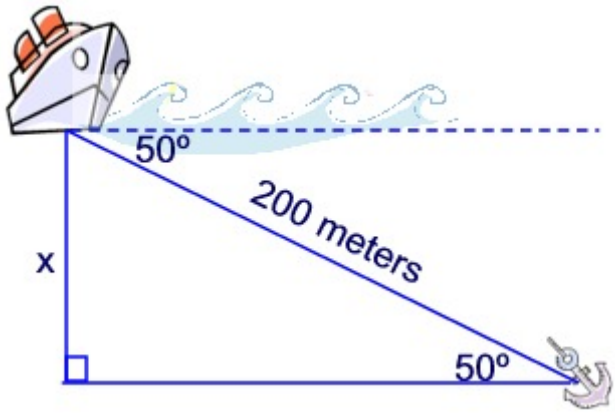


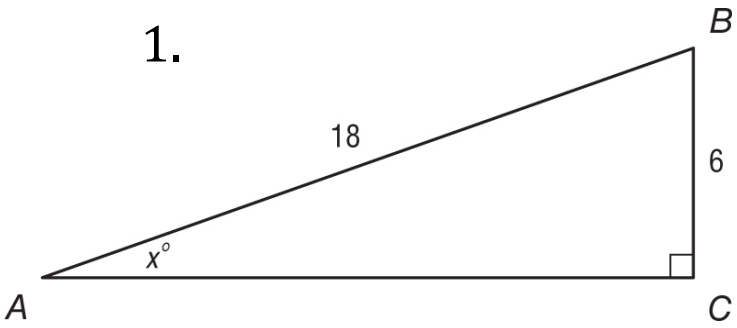
5.



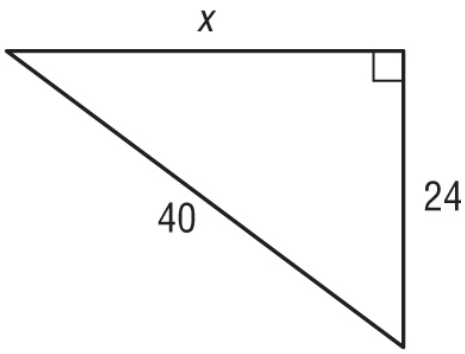
Station 3

Directions: Use Pythagorean Theorem, Special Right Triangles, or Trigonometry to solve the following problems. Round to nearest hundredth.

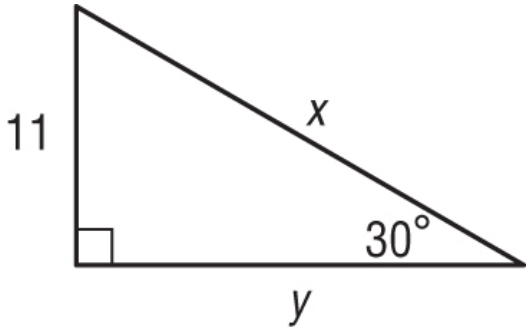
1.



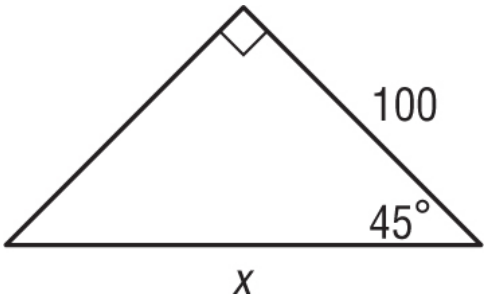
2.



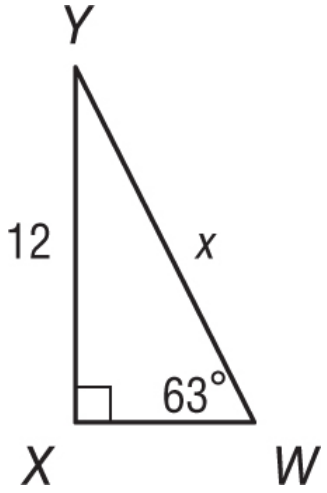
3.



4.



5.



Station 4

Directions: Use the graph attached on your packet to answer the following questions.

1. On your graph, graph the following trigonometric ratios for the following angles. Round to hundredth. In red, graph the sine ratios. In blue, graph the cosine ratios.

0°, 10°, 20°, 30°, 40°, 45°, 50°, 60°, 70°, 80°, 90°

Example: sin(10°)=0.17 --> Graph (10, 0.17) in red

2. Explain the trend for the sine function.

3. Explain the trend for the cosine function.

4. Where are sine and cosine the same ratio?

Station 5

Directions: Solve the following word problems. Round to the nearest hundredth.

1. When Ricky and Bobby went outside to determine how tall the flagpole was, they decided to measure the length of the pole's shadow (39 feet) and they were able to approximate the angle of elevation (31°). How tall is the flagpole?

2. You are constructing a right triangular planter for the corner of your yard. You have 35 feet of 2x4's to cut into three pieces. At what lengths can you cut the 35 feet of 2x4's to make a triangular planter and what angles are created in your right triangular planter?