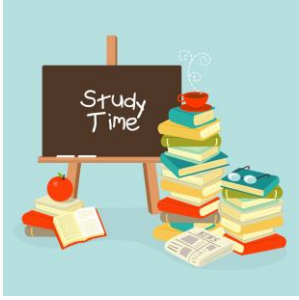
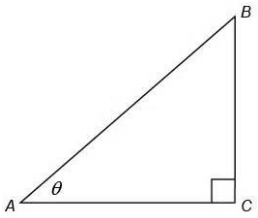


Geometry Reflective Portfolio
Unit #6: Right Triangle Trig

Section #1: Vocabulary (words and/or diagrams)

Angle of elevation (include a diagram)	Angle of depression (include a diagram)
Co-functions	**Right triangle: label O,H, A** 

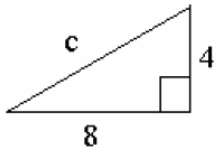
Section #2: Formulas/Equations/Theorems

- **Pythagorean Theorem**
- **Use SOH CAH TOA to write out the 3 basic trig ratios:**
- **Co-functions: Sin (x°) =Cos_____**

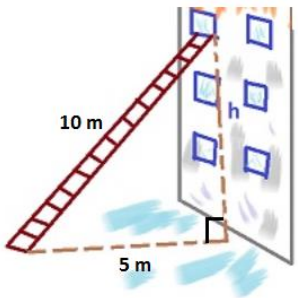
Section #3: Key methods and concepts (write out the process and/or a solved example)

- **When do you use the Pythagorean Theorem?**

Example#1: Solve for x in simplest radical form.



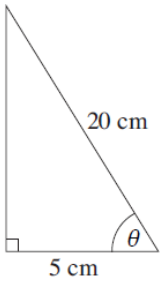
Example#2: Solve for h to nearest tenth



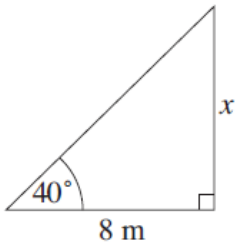
- **How do you setup and solve a problem using a trig ratio?**

Example#3: Solve each. Round angles to nearest degree and sides to nearest tenth of a unit.

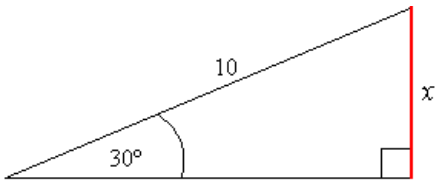
A)



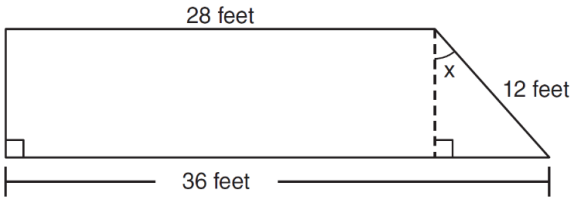
B)



C)



Example#4: A trapezoid is shown below. Calculate the measure of angle x, to the nearest degree.

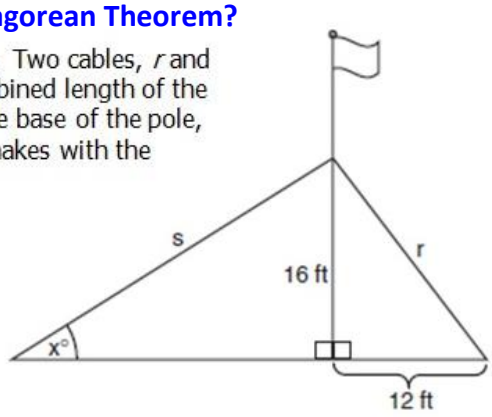


- **What are the calculator instructions to solve for an angle?**

Example#5: Solve for x to the nearest degree. Sin x = 4/5

- **How do you know when to use trig and when to use the Pythagorean Theorem?**

The accompanying diagram shows a flagpole that stands on level ground. Two cables, *r* and *s*, are attached to the pole at a point 16 feet above the ground. The combined length of the two cables is 50 feet. If cable *r* is attached to the ground 12 feet from the base of the pole, what is the measure of the angle, *x*, to the *nearest degree*, that cable *s* makes with the ground?



- **How do you solve an equation where the sine is equal to the cosine?**

Example#6: Solve for x. Sin (2x + 30) = cos (4x)