**Estimating Heights Lab Activity** Members: \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

Draw a picture for each problem and label the given information.  Answers should be to the nearest tenth. Explain the process that your group used to solve the problem.You need a tape measure, clinometer, writing utensil, and a calculator. Make sure to measure out at least 25 feet away from the object for a better angle reading.

Find the **height** of the **ceiling in the Commons** using more than one method. Using complete sentences, answer on the back which method that you feel is more accurate.

**1) Method #1:** Trigonometry

Distance from object: \_\_\_\_\_\_\_\_\_ Angle of elevation:   \_\_\_\_\_\_\_\_\_

Angle of depression: \_\_\_\_\_\_\_\_\_

Picture and solution

**2) Method #2:**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Picture and solution