Height Measuring Project

Instructor: Cheryl Jaeger Balm

Assignment: Get into groups of 3 or 4 people. Each group must build a clinometer and use it to measure the height of three objects. Record all relevant data and draw diagrams representing each object. Anything is fair game: buildings, street lights, even a piece of paper taped to a wall. However, you must manually verify the actual height of **one** of the objects you measure. Additionally, you **must** photograph each object, and mark the exact point you measure.

Grading: This assignment will be graded based on completion and participation.

- 12 points Properly recorded all data for all 3 objects. Remember to show your work when calculating the height of your objects, and don't forget the units!
- 5 points Draw diagrams detailing the eye height of the observer, the distance from each object, the angle of elevation of each object and the calculated height of the object.
- 5 points Take pictures of each object and either email them to your instructor or staple them to your project. Make sure you mark the exact point you measured! If you choose to email your photos, send all pictures in one email to balmcheryl@deanza.edu before the start of class on the date the project is due.
- 5 points Answer the questions at the end of the assignment. Answers should be typed and in complete sentences.
- 3 points Your participation will be evaluated by your group members at the end of the project. If your group members rate you very poorly, your grade for the entire project may be reduced by more than 3 points.

Only one project needs to be submitted by each group.

This project is worth a total of **30 points**.

<u>Due date:</u> Your completed assignment is due at the beginning of class on **Tuesday**, **May 24**. Late work will not be accepted for full credit for any reason. Projects may be turned in early.