**Height of Custer Statue**

**Purpose**

Use indirect measurement in the calculation of the height of the Gen. Custer statue in Monroe.

**Directions**

1. Read all of the directions first. (If nothing else, it will give you an idea of the materials you will need.)

2. Measure a distance (along the ground) away from the Custer statue. This will be one side of a triangle.

3. Measure the angle of elevation from your line of sight up to the top of the Custer statue. (One possible way to find this is found in #3e. at the top of page 469 in your textbook. If you need a protractor, there is one below.)

4. Use a trig ratio to find the distance from your eyes to the top of the Custer statue. That is another side of the same triangle.

5. Add the distance from your eyes to the ground to find the height of the Custer statue.

6. Write a report (which is to be a typed paper, PowerPoint or Google Slides, or a poster board – you can also present this report to the class, if you desire) of your study, including:

* all of your measurements
* a picture demonstrating what your measurements mean and how they are forming a triangle
* text, pictures, videotape, and/or sketches demonstrating exactly how you found all of your direct measurements
* all of your work in finding the distance from your eyes to the top of the statue
* an explanation of how this all comes together to find the height of the statue

Grading will be based on appearance, accuracy, and explanation of your method.

