# Lab A-1: Parallax

NAME:

- **Purpose:** 1. To determine the distance to a far away object.
  - 2. To determine the uncertainty in your measurement.

Materials: 1 meter stick 1 protractor

#### **Procedure:**

There is a styrofoam ball on a pole clamped to the demo table. Without ever leaving your lab table, your group must figure out a way to measure the distance to the styrofoam ball. At whatever you feel is a convenient point, put a small piece of tape on your table – measure the distance from the ball to this spot. Don't worry about the height of the ball – just find the horizontal distance. You can not throw things at the styrofoam ball.

### Procedure, Data & Diagram:

Describe what you did. Draw a picture of what you tried to measure and give your actual data:

### **Calculations:**

1. Show all your calculations to determine the distance.

2. Calculate the uncertainty in your measurement as a percent.

Calculated Distance = \_\_\_\_\_ meters ± \_\_\_\_\_ %

## **Questions:**

1. Did you make any assumptions in your method?

- 2. How could you make your method more accurate?
- 3. Define the term "parallax."