

# 1711 Lab 1 - Measurement

Name: \_\_\_\_\_

Group: \_\_\_\_\_

Date: \_\_\_\_\_

NOTE: Record units for all measurements.

## Part 1 - Setting a sine bar

Set the 5 inch sine bar to an angle of 25 degrees

Record the total height of the gage blocks required: \_\_\_\_\_ (4 decimal places)

Record the individual heights of the gage blocks used: \_\_\_\_\_

## Part 2 - Determining the angle from a set sine bar

If a 5 inch sine bar rests on a stack of gage blocks that is 2.36 inches tall, what is the angle:

\_\_\_\_\_ (2 decimal places)

**For Parts 3 - 6, record your answer to the number of decimal places to which the instrument is meant to be read.**

## Part 3 - Reading a metric micrometer

Sample number: \_\_\_\_\_

Record the diameter of the sample:

\_\_\_\_\_

Record the length of the sample: \_\_\_\_\_

## Part 4 - Reading an inch micrometer

Sample number: \_\_\_\_\_

Record the diameter of the sample:

\_\_\_\_\_

Record the length of the sample: \_\_\_\_\_

## Part 5 - Reading dial calipers

Sample number: \_\_\_\_\_

Record the diameter of the sample:

\_\_\_\_\_

Record the length of the sample: \_\_\_\_\_

## Part 6 - Reading vernier calipers

Sample number: \_\_\_\_\_

Record the diameter of the sample:

\_\_\_\_\_

Record the length of the sample: \_\_\_\_\_