

## Homework 15

Work each problem below. You may complete the assignment on this paper.

1. List the number of significant digits in each measurement

- a. 150
- b. 23.5
- c. 18.900000
- d. 70,000.1
- e. 150.0

2. Convert the following values into the indicated units:

a. 16 ft = \_\_\_\_\_ m

b. 72° F = \_\_\_\_\_ ° C

c. 200 km = \_\_\_\_\_ miles

d. 5 km = \_\_\_\_\_ m

e. 16° C = \_\_\_\_\_ ° F

f. 12 m/s = \_\_\_\_\_ miles per hour

3. Assume you took the following measurements in the lab:

- 12.5 cm
- 12.6 cm
- 12.5 cm
- 12.7 cm
- 12.9 cm

Compute the average, and the error on the average.

Write your answer as \_\_\_\_\_ cm  $\pm$  \_\_\_\_\_ cm

*Due Thursday, June 25, at the beginning of class.*