QUESTIONS TO HAND IN–INTRODUCTION

NAME_____

LAB INSTRUCTOR_____LAB DAY/TIME_____

1. A clerk in a hardware store can measure length with a ruler to the nearest ±1 mm. If he measures out a length of chain to be 50 cm, what is the percentage uncertainty in the measurement?

2. The same clerk measures out a 50 cm **x** 150 cm piece of screen. What is the best value for the area of the screen?

3. Assuming the uncertainty in each length is still ±1 mm, what is the percentage uncertainty in the area measurement?

4. A carpenter measures the placement of studs in a wall every 16 inches. When she tries to fit an 8 ft length of wallboard, how many studs should it cover?

5. Assume that she can allow herself an error of $\pm\frac{3}{4}$ inch (half the width of a 2 **x** 4), with what accuracy must she make the measurements that locate each stud?