

**Apprenticeship Math 12**  
**PRACTICE QUIZ – Precision and Uncertainty**

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

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

1. Canadian swimmer Annamay Pierse recorded a time of 2:20.12 (recorded as min:sec) in the 200 metre breaststroke.

a) What is the precision of the measurement?

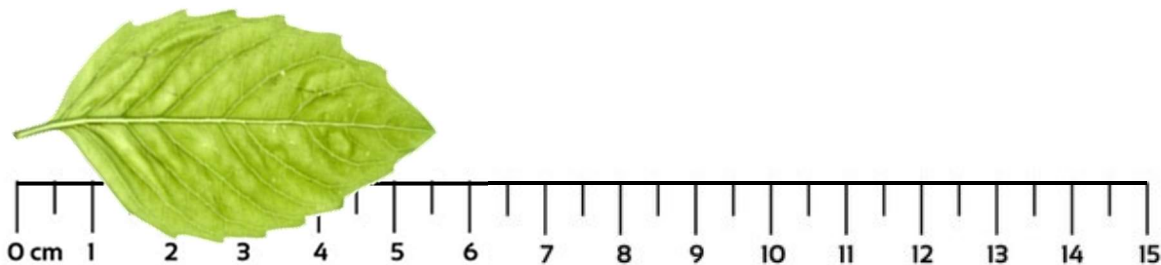
precision: \_\_\_\_\_

b) What is the range of possible values for her actual time?

minimum time: \_\_\_\_\_

maximum time: \_\_\_\_\_

2. Examine the following image:



a) What is the precision of the measuring device?

precision: \_\_\_\_\_

b) What is the measured length, including uncertainty (*measured value ± measurement uncertainty*).

measured length: \_\_\_\_\_ ± \_\_\_\_\_

c) What are the maximum and minimum possible lengths?

maximum: \_\_\_\_\_

minimum: \_\_\_\_\_

3. Determine the length of the item below, including uncertainty (*measured value ± measurement uncertainty*).



measured length: \_\_\_\_\_ ± \_\_\_\_\_

4. Roxana is completing an art project. She measures off two pieces of trim, recording the lengths as follows:

$$125 \text{ cm} \pm 0.5 \text{ cm}$$

$$82 \text{ cm} \pm 0.5 \text{ cm}$$

- a) What is the combined length of the two pieces, including uncertainty?

combined length: \_\_\_\_\_ ± \_\_\_\_\_

- b) What is the difference between the lengths of the two pieces, including uncertainty?

difference: \_\_\_\_\_ ± \_\_\_\_\_