

ASSIGNMENT: Measurement Review (part 2)

Name: _____

Date: _____

1. Match the following terms with the best definition:

_____ accuracy

A. the margin of error of a measurement

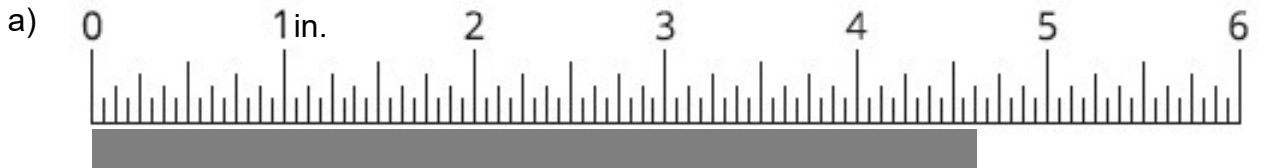
_____ precision

B. how close a measured value is to the true value

_____ uncertainty

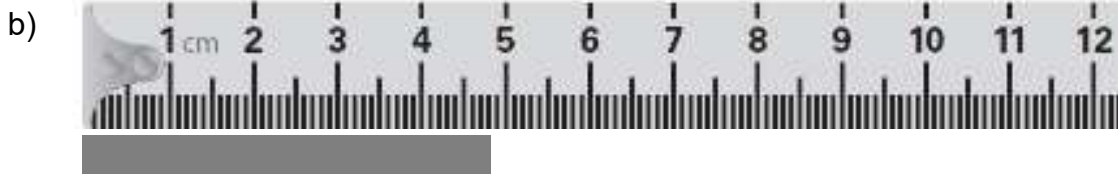
C. the smallest unit of measurement on the measuring device being used

2. For each image, state the precision of the measuring device and determine the length of the item, including its uncertainty.



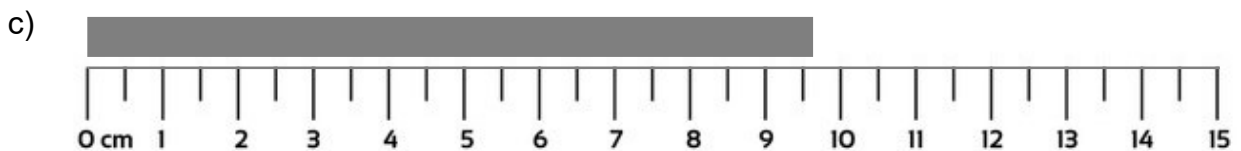
precision: _____

length: _____ ± _____



precision: _____

length: _____ ± _____



precision: _____

length: _____ ± _____

3. Indy is measuring the span of a coupling. The coupling has an actual length of **48.302 mm**. Write the measurement Indy would record, including the measurement uncertainty, if he measured the coupling with the following tools.

a) A meter stick marked in centimeters _____ ± _____

b) A tape measure marked in millimeters _____ ± _____

c) A digital caliper with precision of 0.02 mm _____ ± _____

4. Jacob went fishing and caught three salmon. He weighed the fish on a scale, and found them to weigh 9.3 kg, 4.7 kg, and 8.4 kg.

a) What is the precision of the scale? _____

b) What is the uncertainty for each of the fish weights? _____

c) What is the combined weight of the three fish, including uncertainty?
 _____ ± _____

d) What is the maximum combined weight of the three fish? _____

e) What is the minimum combined weight of the three fish? _____

5. Mary is cutting carpet to be installed in a hallway. She has a piece of carpet that is **18 ft $9\frac{7}{8}$ in.** long and she needs to cut off a piece that is **$6\frac{1}{4}$ in.** long. If she uses the tape measure shown to make her measurements, what is length, including uncertainty, of the remaining length of carpet?

_____ ± _____

