

Units of Measure and Precision

All measurements are approximations. The smaller unit of measure will be more precise than the larger unit of measure.

- ounce is more precise than pint
- $\frac{1}{8}$ inch is more precise than $\frac{1}{2}$ inch
- 0.001 kilogram is more precise than 0.01 kilogram

A pencil can be measured as 5 inches, $5\frac{1}{4}$ inches, $5\frac{3}{8}$ inches, or $5\frac{5}{16}$ inches.

Since $\frac{1}{16}$ is the smallest unit of measure, $5\frac{5}{16}$ is the most precise measurement.

Measure each line segment to the nearest $\frac{1}{8}$ inch and to the nearest centimeter.

1. _____

2. _____

Measure each line segment to the nearest $\frac{1}{16}$ inch and to the nearest millimeter.

3. _____

4. _____

5. _____

6. _____

7. **Geometry** Ed measured a piece of siding for his garage at 12 feet, $4\frac{3}{8}$ inches. Ed's father measured the same piece of siding at 12 feet, $4\frac{1}{4}$ inches. Which overall measurement is more precise? Why?

8. **Writing to Explain** Abby measured the width of a doorway at 1 yd. Celia measured the same doorway at 3 ft 7 in. Which measurement is more precise? Explain.
