



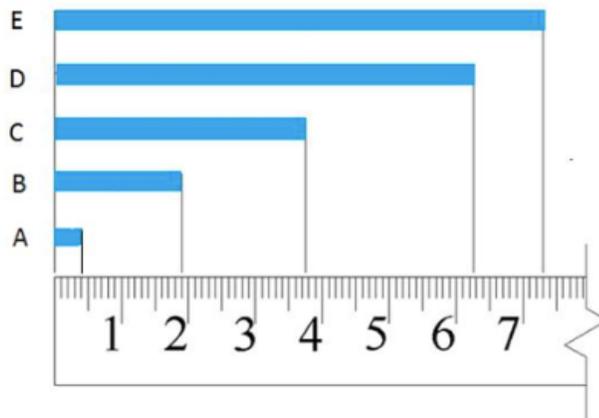
Measurement Activity

Modern civilization cannot exist without measurement systems. Measurements are everywhere, and you use them every day. Every time you buy gas, check the outside temperature, or step on a weight scale, measurements are used to represent a quantity. The abilities to conduct, record, and convert measurements are necessary to understand our technological world and to carry on the business of living. The fields of science, engineering, and mathematics use measurements extensively in the processes of discovery and design.

An interesting aspect of measurement is that a single quantity can be **measured** in different ways. One may describe the height of a horse in hands, feet, or meters. One can give the length of a property line in chains, miles, or meters. The **units** commonly used to measure a quantity can change with time and across borders. In the past it was not necessary to understand the system of measurement used by people outside of your local area, but today the world is a global marketplace.

In this activity you will practice taking linear using SI measurements with a metric ruler and correctly recording the measurements to reflect the precision of the measurement.

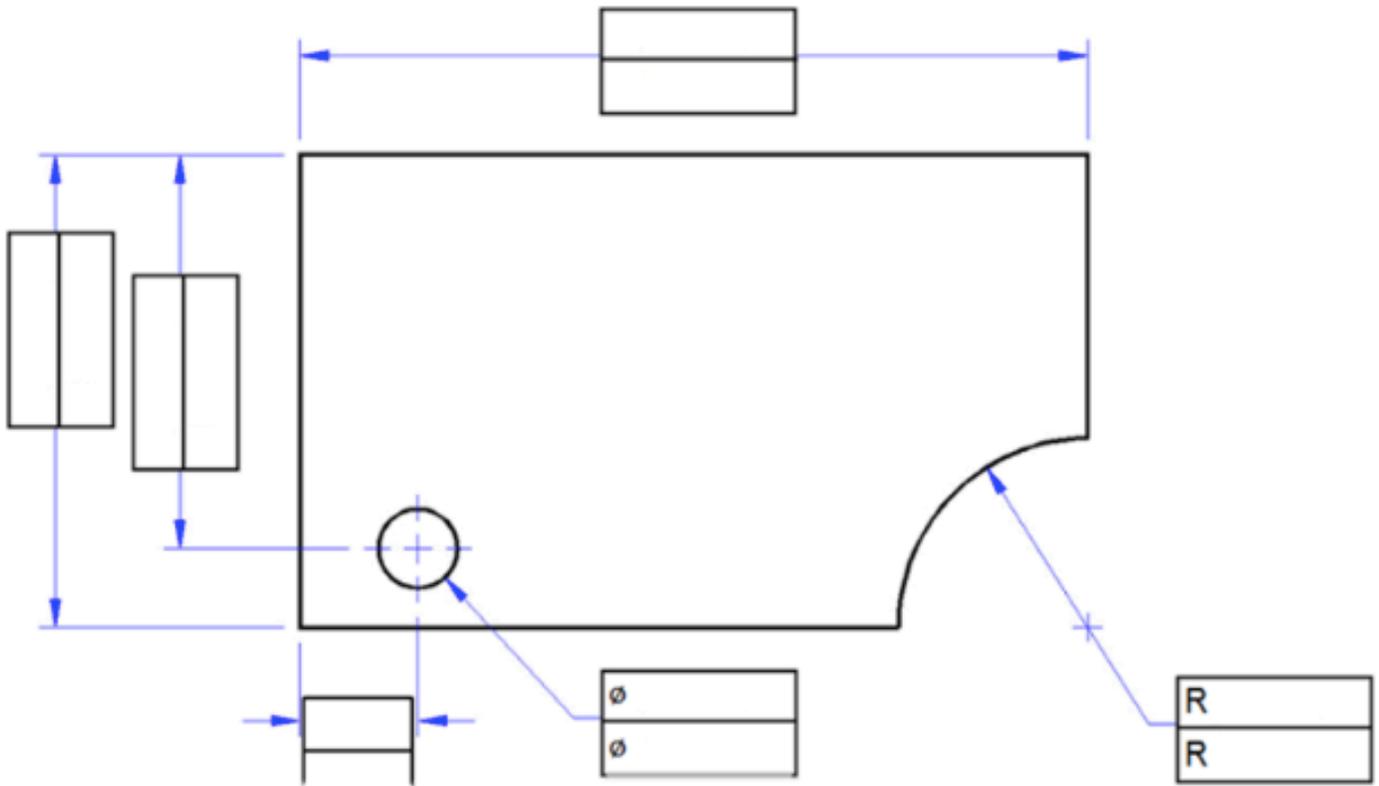
1. Record the length of the rectangles shown in the figure using SI units and the correct number of significant figures. Include the units in your answers.



2. Calculate each of the following lengths and record the answer using the correct units. Show all calculations.
 - a. What is the difference in the length of rectangles A and C?

 - b. What is the difference in the length of rectangles B and E?

3. Using a metric ruler, measure the missing lengths in the figure and enter the **dimensions** in the boxes. Be sure to use the correct units.



4. Measure and record the linear measurement of items in your classroom using appropriate metric units as directed by your instructor. Be sure to include the appropriate units.

Special note: The SMALLEST thing you find should be shorter than 5 cm. The LARGEST thing you find should be larger than 1.5 m.

Object	Description	Units	Measurement