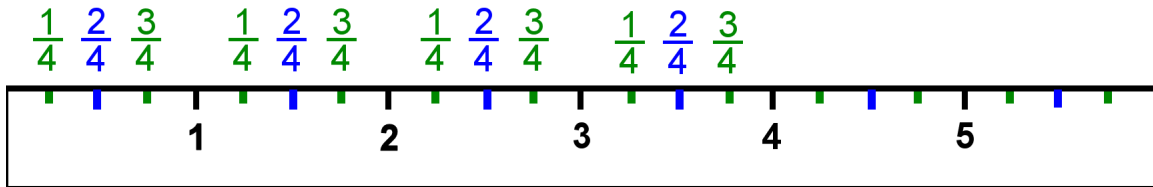


# Measuring Length

Remember? This ruler measures in inches. The three lines between each two numbers on the ruler divide each inch into *four* parts, which are **fourth parts of an inch**.

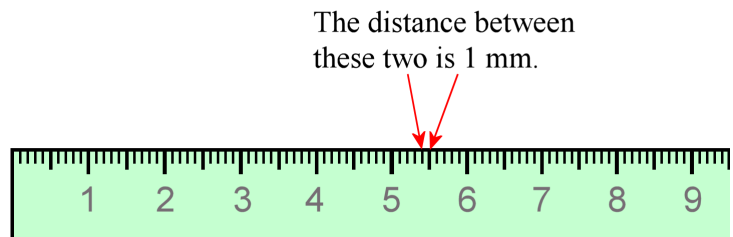


The 2/4 mark is also the 1/2 mark. (We normally use 1/2 instead of 2/4.)


This ruler measures in centimeters. The numbers signify whole centimeters. All the little lines between those are for millimeters.


There are 10 millimeters in each centimeter.

$$10 \text{ mm} = 1 \text{ cm}$$



1. Measure the lines to the nearest fourth of an inch.  
Also measure them in centimeters and millimeters.

 a. \_\_\_\_\_ in. or \_\_\_\_\_ cm \_\_\_\_\_ mm

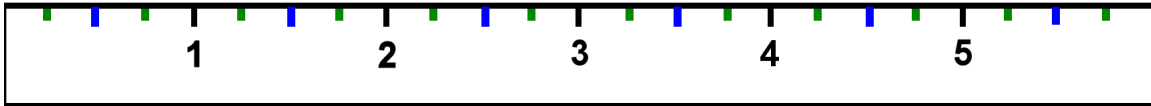
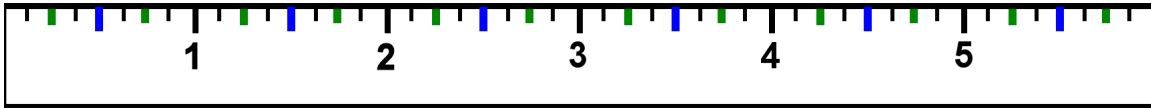
 b. \_\_\_\_\_ in. or \_\_\_\_\_ cm \_\_\_\_\_ mm

 c. \_\_\_\_\_ in. or \_\_\_\_\_ cm \_\_\_\_\_ mm

 d. \_\_\_\_\_ in. or \_\_\_\_\_ cm \_\_\_\_\_ mm

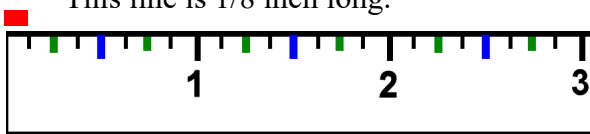
 e. \_\_\_\_\_ in. or \_\_\_\_\_ cm \_\_\_\_\_ mm

In the ruler below, each inch is divided into *eight* parts, which are **eighth parts of an inch**. The lines marking  $1/4$  inches are a little longer than the other lines, and the lines for half inches are a little longer yet.

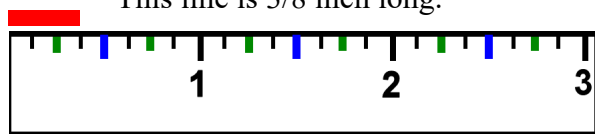


Compare the top ruler to the bottom ruler, which only shows fourth parts of an inch. Notice that  $2/8$  inch =  $1/4$  inch,  $4/8$  inch =  $1/2$  inch, and  $6/8$  inch =  $3/4$  inch.

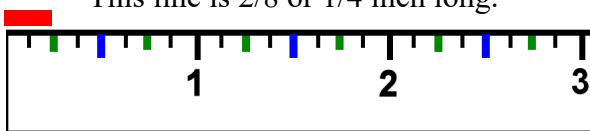
This line is  $1/8$  inch long.



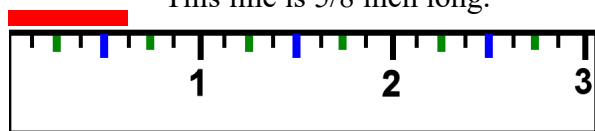
This line is  $3/8$  inch long.



This line is  $2/8$  or  $1/4$  inch long.

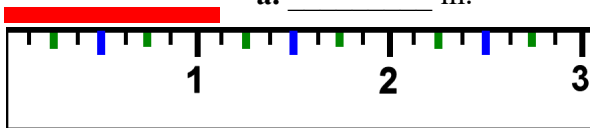


This line is  $5/8$  inch long.

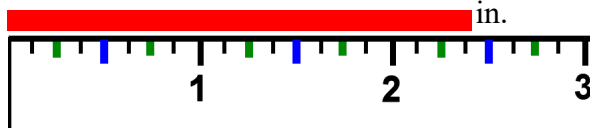


2. Measure these lines.

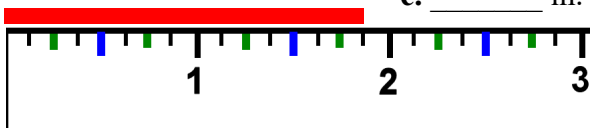
a. \_\_\_\_\_ in.



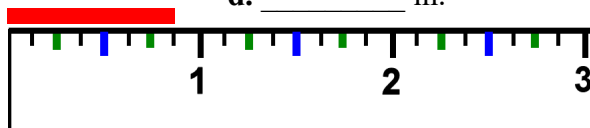
b. \_\_\_\_\_ in.



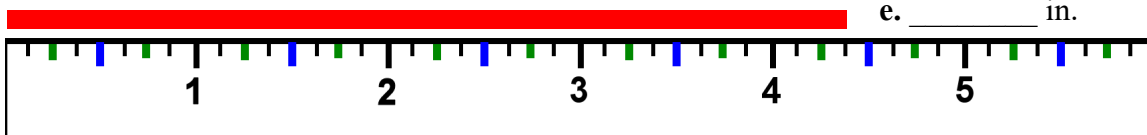
c. \_\_\_\_\_ in.



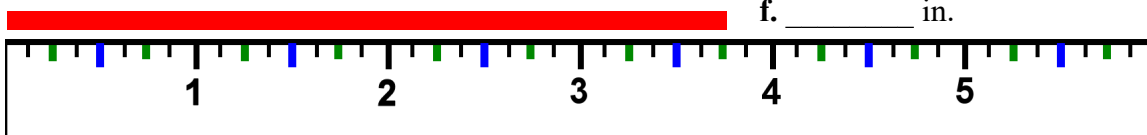
d. \_\_\_\_\_ in.



e. \_\_\_\_\_ in.



f. \_\_\_\_\_ in.



3. Draw lines using a ruler.

a.  $3 \frac{1}{8}$  inches

b.  $4 \frac{1}{4}$  inches

c.  $5 \frac{7}{8}$  inches

d.  $9 \frac{5}{8}$  inches (turn your paper or book sideways)

e.  $7 \frac{1}{2}$  inches

4. Draw lines using a ruler.

a. 5 cm 3 mm

b. 12 cm 1 mm

c. 4 cm 4 mm

d. 25 cm 7 mm (turn your paper or book sideways)

e. 19 cm 9 mm

5. Measure the length of small items (pencils, pens, pins, erasers, books) using a ruler that has marks for eighth parts of an inch. Measuring tapes used for sewing can work, also. Or, you can cut out the ruler from the bottom of this page. (If you printed this page at a scale other than 100%, it will not be accurate.)

Item	Length/width

