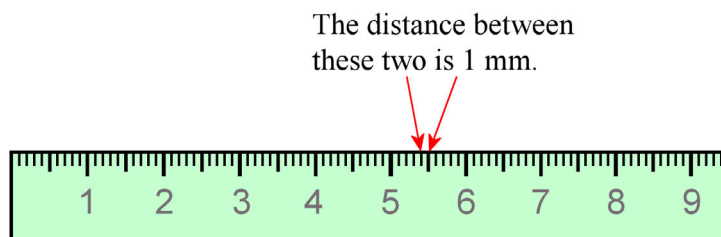


# Centimeters and Millimeters

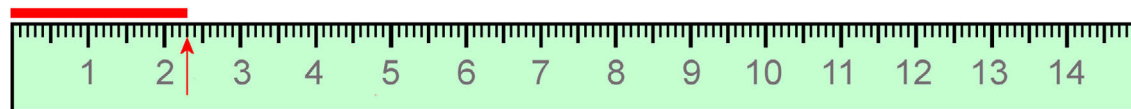
This ruler measures in centimeters. The numbers signify whole centimeters. All the shorter lines between those are for *millimeters*.

The distance from one short line to the next is 1 millimeter. We write 1 mm. Millimeters are very tiny!



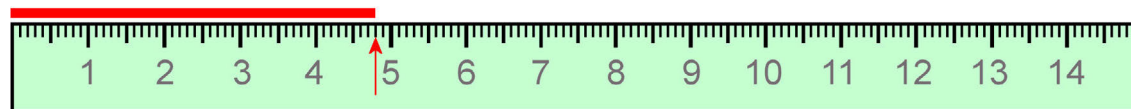
Look at the ruler: **there are 10 millimeters in each centimeter.**

**Measuring lines:** First see how many whole centimeters long the line is. Then count how many little millimeter-lines beyond that it reaches.



This line is 2 cm 3 mm long. At the same time, it is 23 mm long. Why?

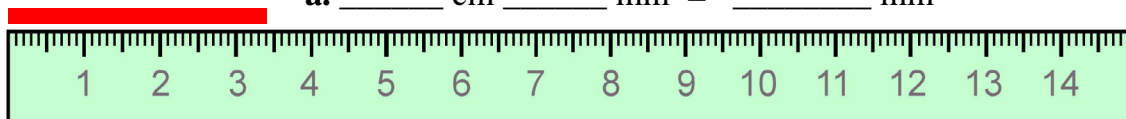
Each centimeter is 10 mm, so 2 cm is 20 mm. So, 2 cm 3 mm makes 23 mm in total.



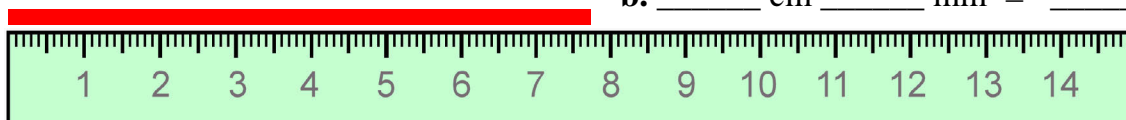
This line is 4 cm 8 mm long. At the same time, it is 48 mm long.

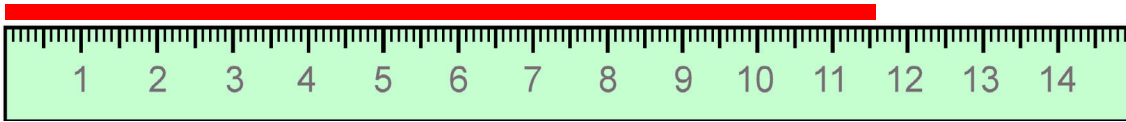
1. Measure the lines using the ruler, first in whole centimeters and millimeters. Then write their lengths using millimeters only.

a. \_\_\_\_\_ cm \_\_\_\_\_ mm = \_\_\_\_\_ mm

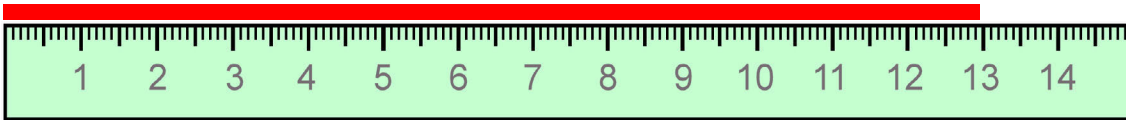


b. \_\_\_\_\_ cm \_\_\_\_\_ mm = \_\_\_\_\_ mm

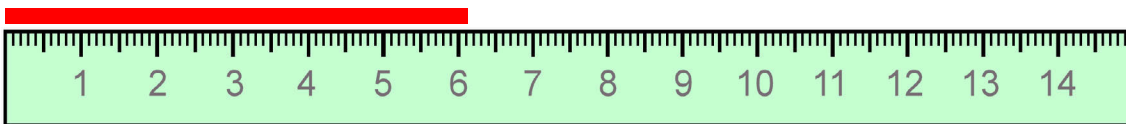




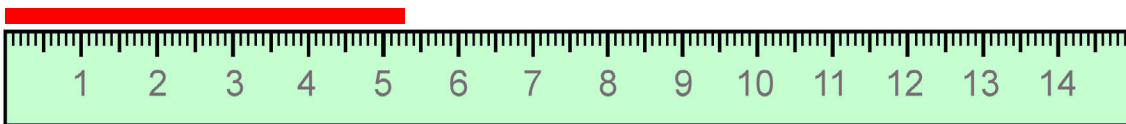
c. \_\_\_\_\_ cm \_\_\_\_\_ mm = \_\_\_\_\_ mm



d. \_\_\_\_\_ cm \_\_\_\_\_ mm = \_\_\_\_\_ mm



e. \_\_\_\_\_ cm \_\_\_\_\_ mm = \_\_\_\_\_ mm



f. \_\_\_\_\_ cm \_\_\_\_\_ mm = \_\_\_\_\_ mm

2. Draw lines using a ruler.

a. 7 cm 8 mm

b. 10 cm 5 mm

c. 14 mm

d. 55 mm

e. 126 mm

3. Measure items, using a centimeter-millimeter ruler. If the item is not exactly as long as the markers on the ruler, choose the nearest mark.

Item	Length

4. Change between centimeters and millimeters. Remember that 1 cm = 10 mm.

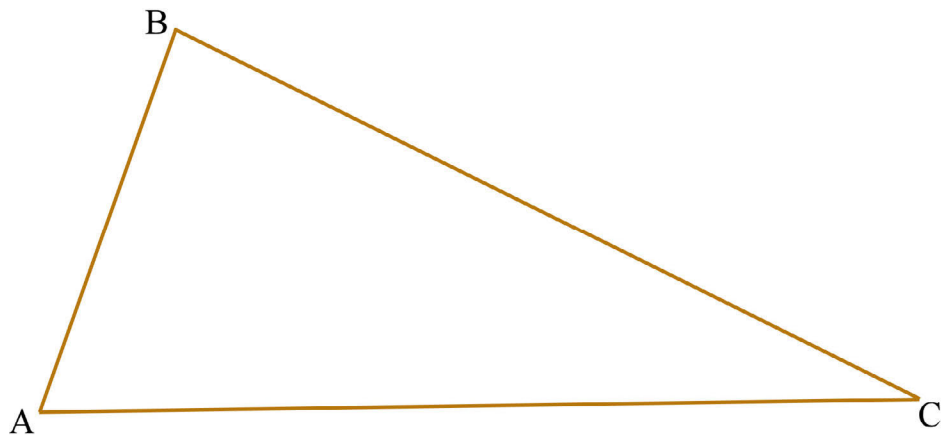
<b>a.</b>	<b>b.</b>	<b>c.</b>
2 cm = _____ mm	1 cm 1 mm = <u>11</u> mm	4 cm 5 mm = _____ mm
5 cm = _____ mm	1 cm 8 mm = _____ mm	7 cm 8 mm = _____ mm
8 cm = _____ mm	2 cm 3 mm = _____ mm	10 cm 4 mm = _____ mm

5. Measure the sides of this triangle in millimeters.

Side AB: \_\_\_\_\_ mm

Side BC: \_\_\_\_\_ mm

Side CA: \_\_\_\_\_ mm



6. If you went all the way around the triangle in #5, what distance would you travel?