

# Understanding Precision

In Sketchpad, displayed measurements are rounded.

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These segments are not the same length.

But when you measure them...

the results may not make sense!

Using Sketchpad's Calculator...

may also give strange results!

**WHAT'S GOING ON?**  
The displayed measurements are being rounded.

Sketchpad stores very precise measurements... but rounds them for display.

Choose Edit | Preferences...

Distance is set to units.

Change the precision to hundredths.

Click OK.

Measure again.

Measurements are now rounded to hundredths.

$m \overline{KL} = 2 \text{ cm}$   
 $m \overline{IJ} = 2 \text{ cm}$

$m \overline{CB} = 1 \text{ cm}$   
 $m \overline{AC} = 1 \text{ cm}$   
 $m \overline{BA} = 1 \text{ cm}$

$m \overline{CB} + m \overline{AC} + m \overline{BA} = 4 \text{ cm}$

$m \overline{BA} = 1.21737 \text{ cm}$

$m \overline{CB} = 1 \text{ cm}$   
 $m \overline{AC} = 1 \text{ cm}$   
 $m \overline{BA} = 1 \text{ cm}$

Distance: cm

Angle: radians

Other (Slope, Ratio, ...)

Apply To: ☒ This Sketch ☐ New Sketches

Help Cancel OK

Units Color

Angle: radians

Distance: cm

Other (Slope, Ratio, ...)

units  
tenths  
**hundredths**  
thousandths  
ten thousandths  
hundred thousandths

New Sketches

Help Cancel OK

$m \overline{BA} = 1.22 \text{ cm}$   
 $m \overline{CB} = 1.22 \text{ cm}$   
 $m \overline{AC} = 1.22 \text{ cm}$

$m \overline{BA} + m \overline{CB} + m \overline{AC} = 3.65 \text{ cm}$