

Warm up

Jason is 1 meter 75 centimeters tall. How tall is he in millimeters?

- A. 125 mm
- B. 175 mm
- C. 1,250 mm
- D. 1,750 mm

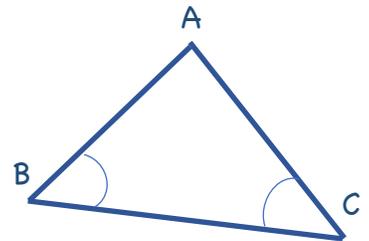
LENGTH

Metric

- 1 kilometer (km) = 1,000 meters (m)
- 1 meter (m) = 100 centimeters (cm)
- 1 centimeter (cm) = 10 millimeters (mm)

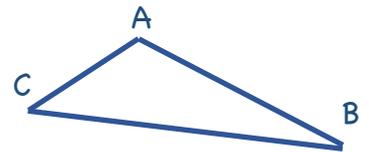
In triangle ABC, the measure of angle $\angle A$ is Angle 80° .
Angle $\angle B$ is congruent to angle $\angle C$. What is the measure of angle B?

- A. 25°
- B. 50°
- C. 75°
- D. 100°

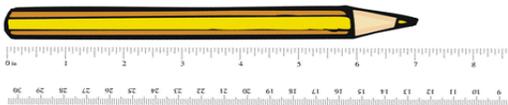


Which of the following would form a triangle with two existing sides of 5 centimeters and 8 centimeters?

- A. 3 cm
- B. 5 cm
- C. 13 cm
- D. 15 cm



How to Convert Measurement Units.



A pencil is 6 inches (in), how long is it in feet (ft)?

1. Find the conversion from what the units are now to the units you need
2. Represent this conversion as a unit rate (make sure the old units will cancel):
3. Cancel the units and multiply.
4. Simplify the fraction if possible.

"1 foot (ft) = 12 inches (in)"

$$\frac{1 \text{ ft}}{12 \text{ in}}$$

$$\frac{6 \cancel{\text{ in}}}{1} \cdot \frac{1 \text{ ft}}{12 \cancel{\text{ in}}} = \frac{6 \text{ ft}}{12}$$

$$\frac{6 \text{ ft}}{12} \div \frac{6}{6} = \frac{1}{2} \text{ ft}$$

Triangle Postulate

The three internal angles of a triangle add up to _____

To find the measure of a missing angle in a triangle, begin with 180° and subtract any known angle measurements. (Congruent angles, being the same, subtract the same amount).

Ex: A triangle with one angle of 30° and a second angle of 50° must have the third angle of 100°
($180^\circ - 30^\circ - 50^\circ = 100^\circ$)

Triangle Inequality Theorem

The sum of any two sides of a triangle is greater than the third side.

A missing triangle side length must be longer than the difference of the other two side lengths and smaller than their sum.

Ex: A triangle with sides of 4 and 5 cm can only have a third side longer than 1 and shorter than 9cm.
($5-4 = 1$, and $5+4 = 9$)