

# Length Measurement Conversions

Metric – Metric	Metric - English	English – English
Kilo – Hecta – Deca – base – deci – centi – milli 1 meter = 100 cm 1 cm = 10 mm 1 km = 1000 m	2.54 cm = 1 inch 1609 m = 1 mile 1 ft = 30.48 cm	1 ft = 12 in 1 mile = 5280 ft 1 yd = 3 ft

Convert from the first unit to the second unit.

A. 5.8 ft → cm

$$5.8 \text{ ft} \left( \frac{30.48 \text{ cm}}{1 \text{ ft}} \right) = 36.28 \text{ cm}$$

B. 100 cm → ft

C. 2.67 cm → in

D. 20 in → cm

E. 5567.8 m → mi

F. 3.32 mi → m

G. 256 m → mm

$$256 \text{ m} \left( \frac{100 \text{ cm}}{1 \text{ m}} \right) \left( \frac{10 \text{ mm}}{1 \text{ cm}} \right) = 256000 \text{ mm}$$

$$256 \text{ m} \left( \frac{1000 \text{ mm}}{1 \text{ m}} \right) = 256000 \text{ mm}$$

H. 13567 mm → yd

I. 276354 mm → km

Word Problems.

1. Your friend lives 908.5km away. How many meters away is he?
2. Your sister is 120cm tall. How many inches tall is she?
3. You need 24 inches of wood to make a shelf. How many meters of wood should you buy?
4. A really good jumper can jump 5feet. How many centimeters did she jump?
5. You need to buy 120 feet of rope but the rope is only sold in 10 meter long rolls. How many rolls do you need?
6. You are making a dress and need a piece of fabric that is a minimum of 45 inches by 70 inches. Fabric is sold in pieces that are 2 meter wide and as long as you want. How many meters of fabric do you need?
7. Make up your own length conversion problem.