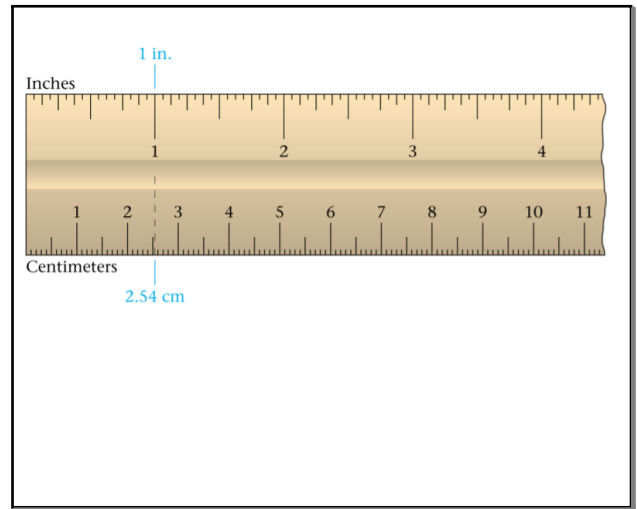


Sep 13-4:40 PM



Nov 10-1:39 PM

Metric (SI) Measurements

Length	Equivalent length
1 m	100 cm
1 m	1,000 mm
1 cm	10 mm
1 km	1,000 m

Nov 16-8:25 AM

Imperial Length Measurements

Length	Equivalent length
1 inch	0.0833 foot
1 foot	12 inches
1 yard	3 feet
1 mile	5,280 feet

Nov 16-8:25 AM

METRIC CONVERSIONS		
1 centimeter	= 10 millimeters	1 cm = 10 mm
1 meter	= 100 centimeters	1 m = 100 cm
1 kilometer	= 1000 meters	1 km = 1000 m

Nov 16-8:42 AM

STANDARD CONVERSIONS		
1 foot	= 12 inches	1 ft = 12 in
1 yard	= 3 feet	1 yd = 3 ft
1 yard	= 36 inches	1 yd = 36 in
1 mile	= 1760 yards	1 mi = 1760 yd

Nov 16-8:42 AM

METRIC TO STANDARD CONVERSIONS		
1 millimeter	= 0.03937 inches	1 mm = 0.03937 in
1 centimeter	= 0.39370 inches	1 cm = 0.39370 in
1 meter	= 39.37008 inches	1 m = 39.37008 in
1 meter	= 3.28084 feet	1 m = 3.28084 ft
1 meter	= 1.09361 yards	1 m = 1.09361 yd
1 kilometer	= 1093.6133 yards	1 km = 1093.6133 yd
1 kilometer	= 0.62137 miles	1 km = 0.62137 mi

Nov 16-8:42 AM

STANDARD TO METRIC CONVERSIONS		
1 inch	= 2.54 centimeters	1 in = 2.54 cm
1 foot	= 30.48 centimeters	1 ft = 30.48 cm
1 yard	= 91.44 centimeters	1 yd = 91.44 cm
1 yard	= 0.9144 meters	1 yd = 0.9144 m
1 mile	= 1609.344 meters	1 mi = 1609.344 m
1 mile	= 1.609344 kilometers	1 mi = 1.609344 km

Nov 16-8:42 AM

Inches to Centimeters

There are 2.5 centimeters in an inch.

$$\text{Inches} \times 2.5 = \text{Centimeters}$$

Centimeters to Inches

There are 2.5 centimeters in an inch.

$$\text{Centimeters} \div 2.5 = \text{Inches}$$

Sep 12-2:39 PM

Sep 12-2:40 PM

Miles to Kilometers

There are 1.6 kilometers in a mile.

$$\text{Miles} \times 1.6 = \text{Kilometers}$$

Kilometers to Miles

There are 1.6 kilometers in a mile.

$$\text{Kilometers} \div 1.6 = \text{Miles}$$

Sep 12-2:40 PM

Sep 12-2:40 PM

Kilograms to Pounds

There are 2.2 pounds in a Kilogram.

$$\text{Kilograms} \times 2.2 = \text{Pounds}$$

Pounds to Kilograms

There are 2.2 pounds in a Kilogram.

$$\text{Pounds} \div 2.2 = \text{Kilogram}$$

Sep 12-2:40 PM

Sep 12-2:40 PM

Ounces to Milliliters

There are 30 milliliters in an Ounce.

$$\text{Ounce} \times 30 = \text{Milliliters}$$

Milliliters to Ounces

There are 30 milliliters in an Ounce.

$$\text{Milliliters} \div 30 = \text{Ounces}$$

Sep 12-2:41 PM

Sep 12-2:41 PM

Feet to Centimeters

There are 30 Centimeters in a Foot.

$$\text{Feet} \times 30 = \text{Centimeters}$$

Sep 12-2:41 PM

Centimeters to Feet

There are 30 Centimeters in a Foot.

$$\text{Centimeters} \div 30 = \text{Feet}$$

Sep 12-2:41 PM

Meters to Inches

There are 39 Inches in a Meter.

$$\text{Meter} \times 39 = \text{Inches}$$

Sep 12-2:41 PM

Convert the following measurements.

① 3 ft. = _____ inches

② 14 yds = _____ feet

③ 145 cm = _____ m

④ 1.8 km = _____ mm

Nov 21-8:59 AM

$$\textcircled{5} \quad 6 \text{ in} = \underline{\hspace{2cm}} \text{ cm.}$$

$$\frac{\text{Inches}}{\text{cm}} = \frac{1}{2.54} = \frac{6}{\text{cm}}$$

$$\text{cm} = 6(2.54)$$

$$\text{cm} = 15.24 \text{ cm}$$

Nov 21-9:06 AM

$$\textcircled{6} \quad 17 \text{ cm} = \underline{\hspace{2cm}} \text{ inches}$$

$$\frac{\text{Inches}}{\text{cm}} = \frac{1}{2.54} = \frac{I}{17}$$

$$2.54 I = 17$$

$$I = \frac{17}{2.54}$$

$$I = 6.7''$$

Nov 21-9:09 AM

$$\textcircled{7} \quad 16 \text{ m} = \underline{\hspace{2cm}} \text{ yds.}$$

$$\frac{\text{m}}{\text{Yds}} = \frac{1}{1.09361} = \frac{16}{Y}$$

$$Y = 16(1.09361)$$

$$Y = 17.5 \text{ yds.}$$

Nov 21-9:11 AM

$$\textcircled{8} \quad 23.5 \text{ yds} = \underline{\hspace{2cm}} \text{ m}$$

$$\frac{\text{m}}{\text{Yds}} = \frac{1}{1.09361} = \frac{\text{m}}{23.5}$$

$$\frac{\text{m}}{\text{Yds}} = \frac{0.9144}{1} = \frac{\text{m}}{23.5} = 21.5 \text{ m}$$

$$\text{m} = 23.5(0.9144)$$

$$\text{m} = 21.5 \text{ m}$$

Nov 21-9:13 AM

$$15 \text{ miles} = \underline{\hspace{2cm}} \text{ km.}$$

$$\frac{\text{miles}}{\text{km}} = \frac{1}{1.609344} = \frac{15}{k}$$

$$k = 15(1.609344)$$

$$k = 24.14 \text{ km.}$$

Nov 21-9:18 AM

Convert the following measurements.

1. 185 mm = _____ dm
2. 12.6 yards = _____ feet
3. 7.86 km = _____ m
4. 4.5 miles = _____ yards
5. 5.4 yards = _____ inches

Nov 21-11:52 AM

Convert the following measurements.

6. 5.7 miles = _____ m
7. 1250 inches = _____ cm
8. 8.3 feet = _____ cm
9. 125 mm = _____ inches
10. 4.9 miles = _____ km

Nov 21-11:55 AM

Convert the following measurements.

11. 14 cm = _____ inches
12. 59 inches = _____ cm
13. 7250 m = _____ miles
14. 130 inches = _____ mm
15. 15 miles = _____ km

Nov 21-11:57 AM

Textbook
 page: 86 # 1-3, 5, 8, 10, 11
 page: 90 # 1-8
 page: 92 # 5

Nov 21-9:21 AM

2.3 Length Conversions, pages 82 to 93
 On the Job 1
 Check Your Understanding
 1. Examples: a) 10 cm b) 15 cm c) 25 cm d) 30 cm
 2. a) 10.16 cm b) 15.24 cm c) 25.4 cm d) 30.48 cm
 3. a) 101.6 mm b) 152.4 mm c) 254 mm d) 304.8 mm
 4. a) $3\frac{15}{16}$ in. b) $7\frac{7}{8}$ in. c) $11\frac{13}{16}$ in. d) $15\frac{3}{4}$ in.
 5. a) 30.48 cm b) Example: The accuracy required depends on the reason for making the conversion. For estimation, 30 cm is easiest to work with.
 c) 180 cm, d) 183 cm e) 182.88 cm
 f) Example: estimating the length of a car
 g) Example: buying a length of copper wire for a building project
 6. 21 in.
 7. Examples: a) I used two stride lengths to represent 1.8 m.
 b) Example: Two stride lengths measured 1.7 m.
 c) 71 in. or 5 ft 11 in.
 8. 6 ft 7 in. to 8 ft 2 in.
 9. a) 45.5 ft b) 13.8684 m
 c) I changed the length to metres because the total length is long.
 10. No, the two board sizes are very similar. Callie's boards measure 88.9 mm by 19.05 mm, so her boards are approximately 1 mm smaller in width, but approximately 1 mm larger in depth.
 11. a) 1 yd is 3 ft, or approximately 90 cm, so 115 yd is approximately 103.5 m.
 b) 105.156 m or approximately 105.2 m

Nov 21-9:34 AM

6. a) approximately 856 km b) approximately 246 km
 c) approximately 177 km d) approximately 104.6 km
 7. approximately: 1206.75 m
 8. a) Example: about 700 km b) Example: about 430 mi
 c) about 13.21 gal d) \$40.95 e) \$43.00
 3. a) approximately 10 min b) approximately 24 min
 c) approximately 38 min d) approximately 1 h 27 min
 e) approximately 5 h 38 min f) approximately 12 h 4 min
 4. a) approximately 26 mi b) approximately 41 mi
 c) approximately 54 mi
 d) approximately 82 mi e) approximately 107 mi
 5. a) 110.7 km b) approximately 69 mi

Nov 21-9:37 AM