

1.2 Imperial Unit Conversion Worksheet

1) Convert the following Imperial Units.

a) 11 feet 7 inches = _____ inches

g) 4400 yards = _____ miles

b) 40 inches = _____ feet _____ inches

h) 84 inches = _____ yard _____ feet

c) 72 inches = _____ feet

i) $2\frac{3}{4}$ feet = _____ inches

d) 5 yards = _____ feet

j) $1\frac{1}{2}$ yard = _____ inches

e) 1.5 miles = _____ yard

k) 2.5 feet = _____ inches

f) 3.5 miles = _____ feet

l) 39 inches = _____ feet _____ inches

1.2 Imperial Unit Conversion Worksheet

1) Convert the following Imperial Units.

a) 11 feet 7 inches = 139 inches

$$11 \text{ ft} \times \frac{12 \text{ in}}{1 \text{ ft}} = 132 \text{ in} + 7 \text{ in} = 139$$

g) 4400 yards = 2.5 miles

$$4400 \text{ yds} \times \frac{1 \text{ mi}}{1760 \text{ yds}}$$

b) 40 inches = 3 feet 4 inches

$$40 \text{ in} \times \frac{1 \text{ ft}}{12 \text{ in}} = 3 \quad \begin{array}{r} 40 \\ -36 \\ \hline 4 \end{array}$$

$$3 \times 12 = 36$$

h) 84 inches = 2 yard 1 feet

$$84 \text{ in} \times \frac{1 \text{ yd}}{36 \text{ in}} =$$

$$\begin{array}{r} 84 \\ -72 \\ \hline 12 \end{array} \times \frac{1 \text{ ft}}{12 \text{ in}}$$

c) 72 inches = 6 feet

$$72 \text{ in} \times \frac{1 \text{ ft}}{12 \text{ in}}$$

i) $2\frac{3}{4}$ feet = 33 inches

$$2\frac{3}{4} \text{ ft} \times \frac{12 \text{ in}}{1 \text{ ft}}$$

d) 5 yards = 15 feet

$$5 \text{ yds} \times \frac{3 \text{ ft}}{1 \text{ yds}} = 15$$

j) $1\frac{1}{2}$ yard = 54 inches

$$1\frac{1}{2} \text{ yd} \times \frac{36 \text{ in}}{1 \text{ yd}}$$

e) 1.5 miles = 2640 yard

$$1.5 \text{ mi} \times \frac{1760 \text{ yds}}{1 \text{ mi}}$$

k) 2.5 feet = 30 inches

$$2.5 \text{ ft} \times \frac{12 \text{ in}}{1 \text{ ft}}$$

f) 3.5 miles = 18,480 feet

$$3.5 \text{ mi} \times \frac{5280 \text{ ft}}{1 \text{ mi}}$$

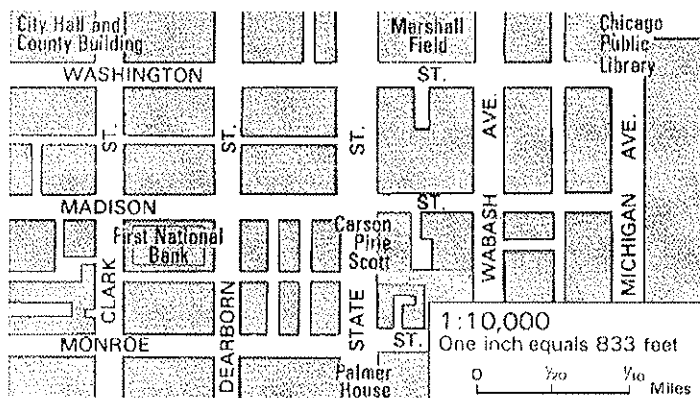
l) 39 inches = 3 feet 3 inches

$$39 \text{ in} \times \frac{1 \text{ ft}}{12 \text{ in}}$$

$$\begin{array}{r} 36 \\ \hline 3 \end{array}$$

Scale Drawings/Models & Scale Factor (SOL 7.6)

- **Scale:** The relationship between the measurements on a drawing or model and the measurements of the real object.
- **Scale drawings:** represent something that is too large or too small to be drawn at actual size.
- Distances on a scale drawing or model are **proportional** to the real-life distances they represent.



A map is an example of a scale drawing!

The _____ is the ratio of a given length on a drawing or model to its corresponding actual length.

- We can use the scale on a map to find out the _____ distance between cities and landmarks. To do this, we need to write and solve a _____.

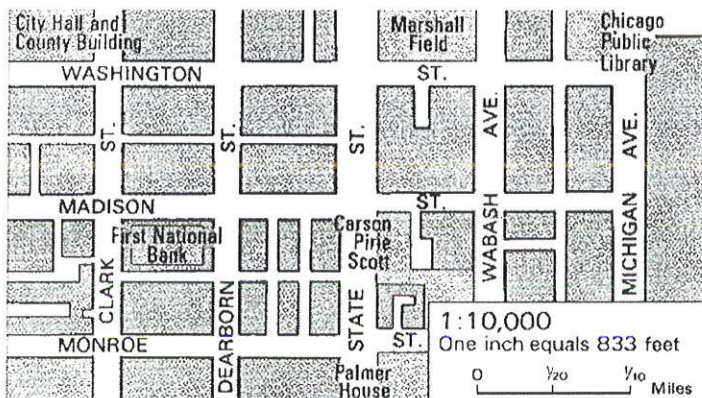
Example 1: On a map of Florida, the distance between Coral Springs and Fort Lauderdale is about 4.1 centimeters. The scale on the map is 1 centimeter = 4.5 kilometers. What is the actual distance?

Example 2: On a map of North Carolina, the distance between Raleigh and Charlotte is $3\frac{1}{4}$ inches. The scale on the map is 1 inch = 40 miles. What is the actual distance?

Example 3: On a map of Texas, the distance between Houston and Austin is $2\frac{3}{4}$ inches. The scale on the map is 1 inch = 50 miles. What is the actual distance between Houston and Austin?

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A map is an example of a scale drawing!

The scale is the ratio of a given length on a drawing or model to its corresponding actual length.

- We can use the scale on a map to find out the actual distance between cities and landmarks. To do this, we need to write and solve a ratio.

Example 1: On a map of Florida, the distance between Coral Springs and Fort Lauderdale is about 4.1 centimeters. The scale on the map is 1 centimeter = 4.5 kilometers. What is the actual distance?

$$4.1 \text{ cm} \times \frac{4.5 \text{ km}}{1 \text{ cm}} = 18.45 \text{ km}$$

Example 2: On a map of North Carolina, the distance between Raleigh and Charlotte is $3\frac{1}{4}$ inches. The scale on the map is 1 inch = 40 miles. What is the actual distance?

$$3.25 \text{ in} \times \frac{40 \text{ mi}}{1 \text{ in}} = 130 \text{ mi}$$

Example 3: On a map of Texas, the distance between Houston and Austin is $2\frac{3}{4}$ inches. The scale on the map is 1 inch = 50 miles. What is the actual distance between Houston and Austin?

$$2.75 \text{ in} \times \frac{50 \text{ mi}}{1 \text{ in}} = 137.5 \text{ mi}$$