## **Skills Practice 9: Converting Between Imperial Measures**

There are 12 inches in 1 foot.

You can use proportional reasoning to help you convert feet to inches.

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

 $\frac{12 \text{ in.}}{1 \text{ ft}} = \frac{\text{in.}}{6 \text{ ft}}$   $\frac{12 \text{ in.}}{1 \text{ ft}} = \frac{\text{in.}}{6 \text{ ft}}$  $\times$  6

You can also count by 12s.

$$1 \text{ ft} = 12 \text{ in.}$$

$$2 \text{ ft} = 24 \text{ in.}$$

$$3 \text{ ft} = 36 \text{ in.}$$

$$4 \text{ ft} = 48 \text{ in.}$$

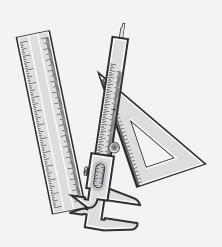
$$5 \text{ ft} = 60 \text{ in.}$$

$$6 \text{ ft} = 72 \text{ in.}$$

1. Solve.

Convert 6 ft 3 in. to inches.

2. Convert each measurement to inches.



6

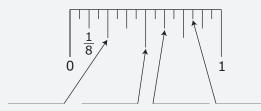
Convert 32 in. to feet and inches.

$$32 = 24 + 8$$
  
= 2 ft 8 in.

- There are 24 inches in 2 feet. There are 36 inches in 3 feet. So 32 inches is 2 foot something.
- **3.** Convert each measure to feet and inches.

Convert fractions of an inch to lowest terms.

Most tape measures and rulers divide each inch into sixteenths. Label the fractions shown.



**4.** Small measurements can be measured as a fraction of an inch. Write these fractions in lowest terms.

**a)** 
$$\frac{4}{16}$$
" = \_\_\_\_\_ **b)**  $\frac{10}{16}$ " = \_\_\_\_\_ **c)**  $\frac{14}{16}$ " =

**b)** 
$$\frac{10"}{16}$$
 = \_\_\_\_\_

**c)** 
$$\frac{14}{16}$$
 = \_\_\_\_\_