

Converting Between Imperial Measures

These questions provide extra practice for the Skills Practice on pages 208–209.

There are 12 inches in 1 foot.

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

$$\frac{12 \text{ in.}}{1 \text{ ft}} = \frac{\quad \text{in.}}{8 \text{ ft}}$$

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$\times 8$
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You can also count by 12s.

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

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

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

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

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

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

$$7 \text{ ft} = 84 \text{ in.}$$

$$8 \text{ ft} = 96 \text{ in.}$$

1. Solve.

a) 5 ft = _____ in.

b) 9 ft = _____ in.

c) 11' = _____ "

d) 2' = _____ "

Convert 5 ft 4 in. to inches.

$$1 \text{ ft} = 12 \text{ in.}, \text{ so } 5 \text{ ft} = 60 \text{ in.}$$

$$5 \text{ ft } 4 \text{ in.} = 60 + 4$$

$$= 64 \text{ in.}$$

2. Convert each measurement to inches.

a) 2 ft 5 in. = _____ inches

b) 5 ft 10 in. = _____ inches

c) 6' 2" = _____ inches



Convert 44 in. to feet.

$$\begin{aligned} 44 &= 36 + 8 \\ &= 3 \text{ ft } 8 \text{ in.} \end{aligned}$$

There are 36 inches in 3 feet.
There are 48 inches in 4 feet.
So 44 inches is 3 foot something.

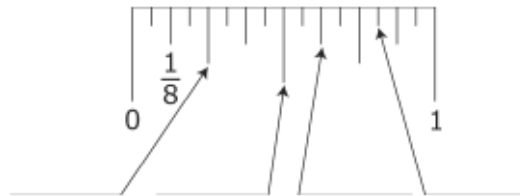
3. Convert each measure to feet and inches.

a) 32 in. = _____ ft _____ in.

b) 65 in. = _____ ft _____ in.

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 in a fraction of an inch. Write these fractions in lowest terms.

a) $\frac{2}{16}$ " = _____

b) $\frac{8}{16}$ " = _____

c) $\frac{12}{16}$ " = _____

5. Explain how you used proportional reasoning to help you answer #4.

