156 ft to inches 12 in = 1 ft

ft → inches - Multiply? YES

* Answer will be greater than 156

Proportion: 2 fractions that are equal

Option 1: $\frac{156\text{ ft}}{X\text{ in}} = \frac{1\text{ ft}}{12\text{ in}}$ $\frac{2\text{ ft}}{24\text{ in}}$

Option 2: $\frac{X\text{ in}}{156\text{ ft}} = \frac{12\text{ in}}{1\text{ ft}}$

Solve for X: $\frac{156\text{ ft}}{X\text{ in}} = \frac{1\text{ ft}}{12\text{ in}}$

Cross Multiply $156 \cdot 12 = X \cdot 1$

$1872 = X$

$\frac{156\text{ ft}}{X\text{ in}} \times \frac{1\text{ ft}}{12\text{ in}}$

w/out Cross mult. $\frac{156}{X} = \frac{1}{12}$

"Isolate x"

What math can we do?

$X = \square$

$\square = X$

- Mult. both sides by 12

$12\left(\frac{156}{X}\right) = \frac{1}{12} \cdot 12$

$\frac{12 \cdot 156}{X} = 1$

$\frac{1872}{X} = 1$

$\frac{1}{12} \cdot 12$

$= \frac{1 \cdot 12}{12}$

$= \frac{12}{12} = 1$

$$\frac{156}{x} = \frac{1}{12}$$

*Focus on moving x

$$x\left(\frac{156}{x}\right) = \frac{1}{12} \cdot x$$

$$156 = \frac{1}{12} \cdot x$$

$$12 \cdot 156 = \frac{1}{12} \cdot x \cdot 12$$

$$= \frac{1 \cdot x \cdot 12}{12}$$

$$12 \cdot 156 = x$$

20.5 yards to feet. 3ft = 1yd

$$\frac{20.5}{x} = \frac{1}{3}$$

*Mult. both sides by x

$$x\left(\frac{20.5}{x}\right) = \frac{1}{3}x$$

$$20.5 = \frac{1}{3}x$$

$$3 \cdot 20.5 = \frac{1 \cdot x \cdot 3}{3}$$

$61.5 = X$

$$\frac{20.5}{X} = \frac{1}{3}$$

$20.5 \times 3 = 1 \cdot X$