

Sore Dancers

1. 238

2. 100

3. \$ 12, \$77

4. \$2, 1.24%

5. \$1400, \$80000

6. \$5400, 123.333333333333333333333333333333%

7. \$210

8. 17.80

Notes April 3

Conversions

Imperial Conversions

12 inches = 1 foot 36 inches = 1 yard

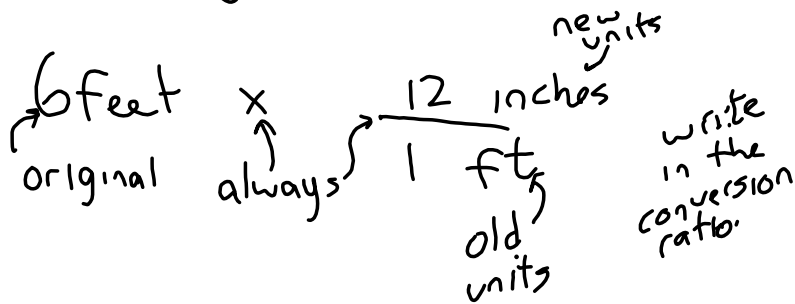
3 feet = 1 yard

5280 feet = 1 mile

1760 yards = 1 mile

Convert 6 feet into inches

* Whenever you convert, use this process:



72 inches.

* multiply the top, divide the bottom!

Convert 396 inches into yards

$$396 \text{ inches} \times \frac{1 \text{ yards}}{36 \text{ inch}}$$

$$396 \times 1 \div 36 = 11 \text{ yards}$$

Convert 3.5 miles into inches

* 2 steps - I need to find a unit that can convert with both!

$$3.5 \text{ miles} \times \frac{5280 \text{ feet}}{1 \text{ miles}} \times \frac{12 \text{ inches}}{1 \text{ feet}}$$

$$3.5 \times 5280 \div 1 \times 12 \div 1$$

$$221760 \text{ inches}$$

Toughest - Imperial decimal system!

Convert 210 inches into yards, feet, and inches.

One way to do this

_____ 180 inches
 36 | 36 | 36 | 36 | 36 |

210 inches

5 yds, 30 inch

24 inch
 12 | 12 |
 30 inch

5 yds 2 feet 6 inch

$$210 \text{ inches} \times \frac{1 \text{ yds}}{36 \text{ inch}}$$

$$210 \times 1 \div 36 = 5.8\bar{3} \text{ yds}$$

$$.8\bar{3}3333 \times 36 = 30 \text{ inches} = 2 \text{ feet } 6 \text{ inch}$$

5 yards 2 feet 6 inches

Costs & Conversions

Rope costs \$3.49 per foot.

You need 8 yards. Determine the cost.

* I want to make the amount agree with the cost!

$$8 \text{ yds} \times \frac{3 \text{ feet}}{1 \text{ yds}}$$

$$8 \times 3 \div 1 = 24 \text{ feet}$$

$$24 \times 3.49 = \boxed{\$83.76}$$

Adding feet & inches

$$7'8'' + 5'2''$$

$$12'10''$$

* add the feet & inches separately

$$8'7'' + 6'9''$$

feet
 $8 + 6 = 14$

inches
 $7 + 9 = 16''$

$$14'16'' \rightarrow 1'4''$$

$$15'4''$$