Class/ Homework

Worksheet: Converting Imperial Lengths

(all questions)

And a

Feet to Inches worksheet

Inchto feet

Jan 25-8:45 PM

Name : _____ Score : _____

Teacher : _____ Date : _____

Converting Feet and Inches

Convert to Inches.

1) 6 feet $8\frac{1}{2}$ inches 80 ½ "

2) 5 feet $2\frac{1}{2}$ inches 62 ½ "

3) 3 feet $11\frac{3}{8}$ inches 47 ⅜ "

4) 2 feet $11\frac{7}{8}$ inches 35 ⅞ "

5) 6 feet $4\frac{7}{8}$ inches 76 ⅞ "

6) 7 feet $8\frac{5}{8}$ inches 92 ⅝"

7) 1 feet $3\frac{1}{2}$ inches 15 ½ "

8) 5 feet $8\frac{3}{8}$ inches 68 ⅜ "

9) 4 feet $2\frac{5}{16}$ inches 50 5/16"

10) 9 feet $1\frac{1}{2}$ inch 109 ½"

Sep 7-12:42 PM

Convert to Feet and Inches.

1) 5' 9 ½"

2) 7' 1 ⅜"

3) 6' 2 ⅞"

4) 5' 2 ⅜"

5) 5' 9 ¾"

$69\frac{1}{2}$ inch

$85\frac{3}{8}$ inch

$74\frac{7}{8}$ inch

$62\frac{3}{8}$ inch

$69\frac{3}{4}$ inch

6) 9' 1 ¼"

7) 2' 8 ¼"

8) 4' 11 ½"

9) 5' 8 ½"

10) 3' 8 5/16"

$109\frac{1}{4}$ inch

$32\frac{1}{4}$ inch

$59\frac{1}{2}$ inch

$68\frac{1}{2}$ inch

$44\frac{5}{16}$ inch

Sep 7-12:42 PM

GMF 10 - Imperial Unit Conversion Name:_____

mi → yd → ft → in

INSTRUCTIONS: Solve the unit conversion problem by cross cancelling units.

9 miles as inches = $9\text{mi} \times \frac{1760\text{ yd}}{1\text{ mi}} \times \frac{3\text{ ft}}{1\text{ yd}} \times \frac{12\text{ in}}{1\text{ ft}}$

570 240 in

17 miles as feet = $17\text{mi} \times \frac{1760\text{yd}}{1\text{ mi}} \times \frac{3\text{ft}}{1\text{yd}} \times \frac{12\text{ in}}{1\text{ ft}} = 89\,760\text{ ft}$

Feb 3-8:48 PM

in → ft → yd → mi

mi → yd → ft → in

54184 feet as miles =

$54184\,ft \times \frac{1\,yd}{3\,ft} \times \frac{1\,mi}{1760\,yd} = 10.26\,mi$

7 miles as inches =

$7\,mi \times \frac{1760\,yd}{1\,mi} \times \frac{3\,ft}{1\,yd} \times \frac{12\,in}{1\,ft}$

$443\,520\,in$

2 miles as inches =

$2\,mi \times \frac{1760\,yd}{1\,mi} \times \frac{3\,ft}{1\,yd} \times \frac{12\,in}{1\,ft} = 126\,720\,in$

Feb 3-8:49 PM

in → ft → yd → mi

824435 inches as miles =

$824435\,in \times \frac{1\,ft}{12\,in} \times \frac{1\,yd}{3\,ft} \times \frac{1\,mi}{1760\,yd}$

$13.01\,mi$

443680 inches as miles =

$443\,680\,in \times \frac{1\,ft}{12\,in} \times \frac{1\,yd}{3\,ft} \times \frac{1\,mi}{1760\,yd}$

$7\,mi$

717897 inches as miles =

$717\,897\,in \times \frac{1\,ft}{12\,in} \times \frac{1\,yd}{3\,ft} \times \frac{1\,mi}{1760\,yd} = 11.33\,mi$

Feb 3-8:50 PM

Page 150
Questions 1,2,3,4,5,6 and 8

1. Convert the following measurements.

a) Convert 3520 yd to miles. 2 mi

b) Convert $10' \frac{3}{16}''$ to inches. 120 3/16 in

c) Convert $8\frac{3}{4}$ yards to feet. 26 1/4 ft or 26 ft 3 in

Feb 3-8:53 PM

2. Choose the correct item to go with each linear measurement. Explain why you chose your answer.

a) About 1 mm: thickness

i) length of a movie ticket ii) ~~width~~ of a fingernail iii) diameter of a quarter

b) About 1 yd:

i) length of a pen ii) height of a chair iii) length of a station wagon

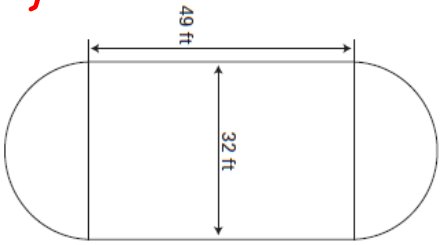
Feb 3-8:53 PM

3. What referent could you use to represent a metre? A foot? Compare your SI referent to your imperial referent. Which is larger? How many of the smaller referent are equal to one of your larger referent?

Feb 3-8:54 PM

4. You have decided to build a small hockey rink in your backyard, as shown in the diagram. You want to use plywood to build rink boards that are 48″ high. Exterior $\frac{1}{2}$″ plywood is sold in 4′ x 8′ sheets that cost $14.15 a sheet.

a) P = 198.5 ft



25 sheets

a) How many sheets of plywood will you need to surround the rink?

b) What will be the cost of the plywood, before taxes?

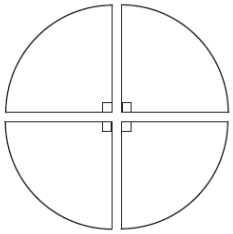
$353.75

$C = 2\pi r$

Feb 3-8:54 PM

5. A landscape gardener has designed a circular herb garden with 4 sectors, shown on the right. The radius of one sector is 4′3″. Each sector will be surrounded with plastic lawn edging that costs $9.99 for a 20′ roll. How much will it cost to put edging around the herb garden? Assume that you cannot buy partial rolls.

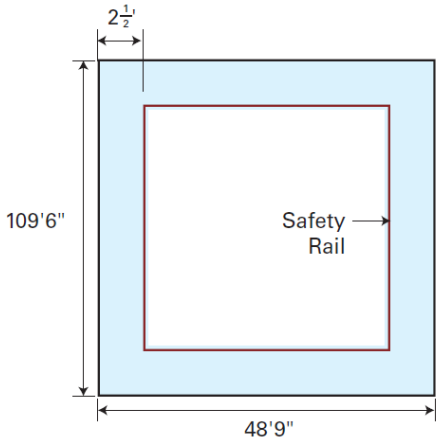
$ 39.96



Total p = 60.7 ft

Feb 3-8:56 PM

6. In professional theatres, there is a catwalk called a fly gallery that runs along the four walls above the stage. Stagehands stand on the fly gallery to raise and lower scenery on and off stage. A structural steel fitter has been asked to replace the inside safety rail of a fly gallery. The space above the stage is 109′6″ long and 48′9″ wide. The fly gallery is $2\frac{1}{2}'$ wide. If the fitter uses rails that are 20 feet long, how many rails will she need?

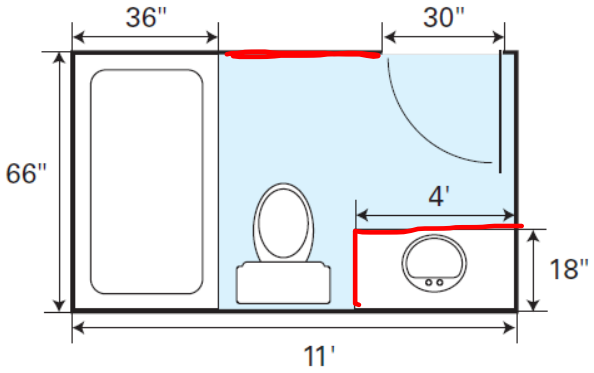


296' 6"

15 rails

Feb 3-8:56 PM

8. A finishing carpenter is working on a partial home renovation project, and the homeowner has asked the carpenter how much it would cost to replace the baseboards in the bathroom. The floor plan of the bathroom is shown on the right. The carpenter bills his time at a rate of $45.00/h and he charges a markup of 15% on materials. Baseboard costs $6.50 a linear foot and the carpenter estimates it will take him two-and-a-half hours. How much does he tell the homeowner it will cost? List any assumptions you made in your calculations.



Without

$52 36.00

markup

$257.53

Feb 3-8:57 PM

Attachments

Worksheet - Converting Imperial Lengths.docx

Worksheet2_ Inches to feet.pdf