

Decimal Feet Worksheet

Name KEY

WITHOUT USING THE TABLE

1) The length of a room is $13' 5\frac{3}{16}"$. What is this in decimal feet?

$$13 + .4167 + .0156$$

$$\boxed{13.4323}$$

13 stays the same

$$5 \text{ inches converted to feet} = \frac{5}{12} = .41667$$

$$\frac{3}{16}" \text{ converted to a foot} = \frac{\frac{3}{16}}{12} = \frac{3}{16} \times \frac{1}{12} = \frac{3}{192} = .015625$$

2) The length of a room is $8' 2\frac{1}{8}"$. What is this in decimal feet?

8 stays the same

$$\frac{2}{12} = .1667$$

$$8 + .1667 + .0104 = \boxed{8.1771}$$

$$\frac{\frac{1}{8}}{12}, \frac{1}{8} \times \frac{1}{12} = \frac{1}{96} = .0104$$

3) 5.1510 feet is equivalent to what in feet and inches?

$$.1510 \times 12 = 1.812$$

5 feet 1 inch and .812 of an inch

$$\frac{812}{1000} = \frac{203}{250} \approx \frac{200}{250} = \frac{4}{5}$$

$$\frac{4}{5} = \boxed{5' 1\frac{4}{5}"}$$

$$\boxed{5' 1\frac{13}{16}"}$$

4) 10.6146 feet is equivalent to what in feet and inches?

10 feet

$$.6146 \times 12 = 7.3752$$

7 inches

$$\frac{3752}{10000} \approx \frac{375}{1000}$$

$$\frac{375}{1000} = \frac{\div 125}{\div 125} = \frac{3}{8}$$

Do we usually measure in $\frac{1}{5}$? NO. This is close to $\frac{13}{16}$

$$\boxed{10' 7\frac{3}{8}"}$$

WITH THE CHART

CONVERT TO DECIMAL FEET

5) $3' 3\frac{13}{16}"$

$$\boxed{3.3177}$$

6) $10' 8\frac{5}{8}"$

$$\boxed{10.7188}$$

Convert to Feet and Inches

7) 10.5

$$\boxed{10' 6"} \quad \text{10.5} = 10 + .5 = 10 + \frac{6}{12}$$

8) 2.2344

$$\boxed{2' 2\frac{13}{16}"}$$