

# Converting Fractions and Decimals Quiz

Name KEY

1) A  $\frac{3}{8}$ " sub floor and a  $\frac{11}{32}$ " flooring were installed in a hall. What is the total floor thickness as a decimal?

$$\begin{array}{r} 4 \times \frac{3}{8} + \frac{11}{32} \\ 4 \times \downarrow \quad \downarrow \\ \frac{12}{32} + \frac{11}{32} = \frac{23}{32} \end{array}$$

$$\begin{array}{r} .71875 \\ 32 \overline{) 23.00000} \\ \underline{224} \phantom{00} \\ 60 \phantom{00} \\ \underline{32} \phantom{00} \\ 280 \phantom{00} \\ \underline{256} \phantom{00} \\ 240 \phantom{00} \\ \underline{224} \phantom{00} \\ 160 \phantom{00} \\ \underline{160} \\ 0 \end{array}$$

$$= .71875"$$

2) The thickness of a carpet pad is 1.125". What is this number as a fraction?

$$1.125 = 1 \frac{125}{1000}$$

$$\frac{125 \div 25}{1000 \div 25} = \frac{5 \div 5}{40 \div 5} = \frac{1}{8}$$

$$= 1 \frac{1}{8}"$$

3) A 0.375" drill bit is the same as what fraction?

$$.375 = \frac{375 \div 25}{1000 \div 25} = \frac{15 \div 5}{40 \div 5} = \frac{3}{8}$$

$$\frac{3}{8}"$$

4) Convert the following fractions to decimals.

a)  $\frac{6}{15}$

$$\begin{array}{r} .4 \\ 15 \overline{) 6.0} \\ \underline{60} \\ 0 \end{array} = .4$$

b)  $\frac{15}{16}$

$$.9375$$

$$\begin{array}{r} .9375 \\ 16 \overline{) 15.0000} \\ \underline{144} \phantom{00} \\ 60 \phantom{00} \\ \underline{48} \phantom{00} \\ 120 \phantom{00} \\ \underline{112} \phantom{00} \\ 80 \phantom{00} \\ \underline{80} \\ 0 \end{array}$$

5) Convert the following decimals to fractions. Reduce to lowest terms

a) 0.96

$$\frac{96 \div 4}{100 \div 4} = \frac{24}{25}$$

b) 0.03125

$$\frac{3125 \div 25}{100,000 \div 25} = \frac{125 \div 25}{4000 \div 25} = \frac{5 \div 5}{160 \div 5} = \frac{1}{32}$$