

- 1) Joe has 12 boards that measure $\frac{3}{4}$ foot each. What is the length of all of them together?

$$12 \times \frac{3}{4} = \frac{12}{1} \times \frac{3}{4} = \frac{9}{1} \quad 9 \text{ feet}$$

- 2) Electrical outlets need to be placed every 6 feet apart. How many electrical outlets will you need for a wall that is $96\frac{7}{12}$ long?

$$96\frac{7}{12} \div 6 = \frac{1159}{12} \div 6 = \frac{1159}{12} \times \frac{1}{6} = \frac{1159}{72}$$

$$\begin{array}{r} 16\frac{7}{12} \\ 72 \overline{) 1159} \\ \underline{72} \\ 439 \\ \underline{432} \\ 7 \end{array}$$

$$\boxed{16\frac{7}{12}}$$

- 3) I have 11 square self-adhesive tiles that are $13\frac{1}{2}$ inches wide. Will these go the length of my hall that is 12 feet long?

$$11 \times 13\frac{1}{2} = \frac{11}{1} \times \frac{27}{2} = \frac{297}{2}$$

$$\begin{array}{r} 148\frac{1}{2} \\ 2 \overline{) 297} \\ \underline{2} \\ 9 \\ \underline{8} \\ 17 \\ \underline{16} \\ 1 \end{array}$$

$$148\frac{1}{2}'' \quad \boxed{\text{Yes}}$$

$$\begin{array}{r} 12 \text{ ft} \mid 12 \text{ inch} \\ \hline 1 \text{ ft} \end{array} = 144 \text{ inches}$$

- 4) Find the height of a riser when the total rise of the stairs is $56\frac{7}{8}$ and there are 7 risers

$$56\frac{7}{8} \div 7 = \frac{455}{8} \div 7 = \frac{455}{8} \times \frac{1}{7} = \frac{65}{8} = 8\frac{1}{8}$$

$$\boxed{8\frac{1}{8}''}$$

5) $\frac{6}{7} \times \frac{2}{5} = \boxed{\frac{12}{35}}$

6) $\frac{4}{5} \div \frac{1}{3} =$

$$\frac{4}{5} \times \frac{3}{1} = \frac{12}{5} = \boxed{2\frac{2}{5}}$$