

3-3-3 Simple Percentages

$$\textcircled{a} \frac{.34 \cdot X}{.34} = \frac{16}{.34}$$

$$X = 47.06$$

$$3/4\% = 0.0075 \text{ so } \frac{.0075 \cdot X}{.0075} = \frac{65}{.0075}$$

$$X = 8666\frac{2}{3}$$

$$\textcircled{b} \frac{21}{.15} = \frac{.15 \cdot X}{.15}$$

$$140 = X$$

$$\frac{2.1}{.005} = \frac{.005 \cdot X}{.005}$$

$$420 = X$$

$$\textcircled{c} X = .15 \cdot 32$$

$$X = 4.8$$

$$2\frac{1}{5}\% = 2\frac{1}{5} \div 100 = \frac{11}{5} \cdot \frac{1}{100} = \frac{11}{500}$$

$$X = \frac{11}{500} \cdot 3.2 \quad X = .022 \cdot 3.2 = 0.0704$$

$$\textcircled{d} \frac{3}{16} = X \cdot \frac{16}{16}$$

$$\frac{3/4}{16} = X \cdot \frac{16}{16}$$

$$\frac{3/4 \div 16}{1} = \frac{3}{4} \times \frac{1}{16} = \frac{3}{64} \text{ change to percent}$$

$$\frac{3}{16} = X \Rightarrow \text{to percent}$$

$$\frac{3}{16} \cdot \frac{100}{1} = \frac{75}{4} = 18\frac{3}{4}\%$$

$$\frac{3}{64} \times \frac{100}{1} = \frac{75}{16} = 4\frac{11}{16}\%$$

$$\textcircled{e} X \cdot \frac{40}{40} = \frac{600}{40}$$

$$X = 15 \text{ change to \%}$$

$$15 \times 100 = 1500\%$$

$$X \cdot \frac{3/4}{3/4} = \frac{6}{3/4}$$

$$6 \div \frac{3}{4} = \frac{6}{1} \times \frac{4}{3} = 8$$

$$X = 8 \Rightarrow \text{Percent } 8 \cdot 100 = 800\%$$

$$\textcircled{f} X = .2 \cdot 32$$

$$X = 6.4$$

$$\frac{14}{84} = X \cdot \frac{84}{84}$$

$$\frac{1}{6} = X \Rightarrow \frac{1}{6} \cdot 100 = 16\frac{2}{3}\%$$

$$\frac{32}{.55} = \frac{.55 \cdot X}{.55}$$

$$58\frac{18}{99} = X$$

$$\textcircled{g} X \cdot \frac{15}{15} = \frac{300}{15}$$

$$X = 20$$

$$20 \cdot 100 = 2000\%$$

$$3.5 \cdot 22 = X$$

$$77 = X$$

$$\frac{.17 \cdot X}{.17} = \frac{22}{.17}$$

$$X = 129.41$$

$$\textcircled{h} \frac{.2 \cdot X}{.2} = \frac{36}{.2} \quad X = 180$$

$$X \cdot \frac{2\frac{3}{2}}{3\frac{2}{2}} = 16 \cdot \frac{3}{2}$$

$$X = 24 \quad 24 \cdot 100 = 2400$$

$$1 \cdot 15 = X$$

$$1.5 = X$$

$$\textcircled{i} 54 = X \cdot 100$$

$$54\%$$

$$\frac{3/4}{3.25} = .25 \cdot X$$

$$13 = X$$

$$X = 2\frac{1}{2}\% \cdot 25 \quad 2\frac{1}{2} \div 100 = \frac{1}{40}$$

$$X = \frac{1}{40} \cdot \frac{25}{1}$$

$$X = \frac{5}{8}$$