

7-3 Using the Percent Proportion

Ratio - a comparison of two numbers using division.

Percent Proportion

Comparing a # to 100 $\text{---} = \frac{\%}{100}$

$$\frac{\text{is}}{\text{of}} \frac{\text{part}}{\text{whole}} = \frac{\%}{100}$$

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

$$\frac{12}{32} = \frac{\%}{100}$$

$$\text{is } \frac{12}{\text{of } 32} = \frac{\%}{100}$$

$$12(100) = \frac{1200}{32} = 37.5$$

37.5%

1A.)

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

$$\frac{.15}{.20} = \frac{P}{100}$$

$$15(100) = 20P$$

$$\frac{1500}{20} = \frac{20P}{20}$$

$$75 = P$$

$$\textcircled{75\%}$$

1B.)

$$\begin{array}{c} \text{is} \\ \text{of} \end{array} \frac{12}{5} = \frac{P}{100}$$

$$12(100) = 5P$$

$$\frac{1200}{5} = \frac{5P}{5}$$

$$240 = P$$

$$\textcircled{240\%}$$

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

$$\frac{\text{is } n}{\text{of } 450} = \frac{15.5}{100}$$

$$69.75 = n$$

$$\begin{aligned} 2A.) \quad & \text{is } \frac{n}{330} = \frac{11.4\%}{100} \\ & \text{of} \\ & 37.62 \\ & \frac{100n}{100} = \frac{3762}{100} \\ & n = 37.62 \end{aligned}$$

$$\begin{aligned} 2B.) \quad & \text{is } \frac{n}{425} = \frac{15.3\%}{100} \\ & \text{of} \\ & 100n = 15.3(425) \\ & \frac{100n}{100} = \frac{6502.5}{100} \\ & n = 65.025 \end{aligned}$$

Do not round unless
you are instructed
to do so!

$$\frac{78}{n} = \frac{60}{100}$$

$$78(100) = 60n$$

$$n = 130$$

$$\begin{aligned} 3A.) \quad & \text{is } \frac{63}{n} = \frac{30}{100} \\ & \text{of} \\ & 63(100) = 30n \\ & \frac{6300}{30} = \frac{30n}{30} \\ & \textcircled{210 = n} \end{aligned}$$

$$\begin{aligned} 3B.) \quad & \text{is } \frac{45}{n} = \frac{3\%}{100} \\ & \text{of} \\ & 45(100) = 3n \\ & \frac{4500}{3} = \frac{3n}{3} \\ & \textcircled{1500 = n} \end{aligned}$$

4.)

$$\frac{151}{639} = \frac{P}{100}$$

$$\textcircled{23.6\%}$$

check
#4.

$$\frac{100}{639} = \frac{P}{100}$$

$$\textcircled{15.6\%}$$

$$100(100) = 639P$$

$$\frac{10,000}{639} = \frac{639P}{639}$$

$$\textcircled{15.6 = P}$$

R32

1, 3, 5, 7

Guided practice