

6.1, 6.4, and 6.5 Quiz Review  $\frac{\text{is}}{\text{of}} = \frac{\%}{100}$

1. Eight is what percent of 64?

$$\frac{8}{64} \times \frac{x}{100}$$

$$\frac{64x}{64} = \frac{800}{64} \quad \boxed{x = 12.5\%}$$

2. What number is 60% of 95?

$$\frac{y}{95} \times \frac{60}{100}$$

$$\frac{100y}{100} = \frac{5700}{100} \quad \boxed{y = 57}$$

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3. Fourteen is 28% of what number?

$$\frac{14}{y} \times \frac{28}{100}$$

$$\frac{1400}{28} = \frac{28y}{28} \quad \boxed{y = 50}$$

4. Find 6% of \$7,500.

$$\frac{d}{7500} \times \frac{6}{100}$$

$$\frac{100d}{100} = \frac{45000}{100} \quad \boxed{d = 450}$$

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5. Sixty is what percent of 40?

$$\frac{60}{40} \times \frac{P}{100}$$

$$\frac{40P}{40} = \frac{6000}{40}$$

$$P = 150\%$$

6. Thirty is 20% of what number?

$$\frac{30}{x} \times \frac{20}{100}$$

$$\frac{20x}{20} = \frac{3000}{20}$$

$$x = 150$$

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7. Christa paid only \$32 for a pair of shoes that were originally \$40. What was the percent of decrease?

$$40 - 32 = 8$$

$$\frac{8}{40} = 0.20 = 20\%$$

8. Timothy owns a tool store. He purchased an electric saw for \$90, but he is selling it for \$117. What is the markup?

$$117 - 90 = 27$$

$$\frac{27}{90} = 0.30 = 30\%$$

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9. Find the percent of error if the estimated distance was 60 miles, but the actual distance is 75 miles.

$$75 - 60 = 15 \quad \frac{15}{75} = 0.20 = \boxed{20\%}$$

10. Find the percent of error when the actual area is 22.5 square inches and the measured area is 24 square inches.

$$24 - 22.5 = 1.5 \quad \frac{1.5}{22.5} = 0.6666\dots = 6.666\dots = \boxed{6.7\%}$$

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11. Marta purchases a \$125 chair at a 30% discount. What is the price that Marta will pay for the chair?

$$100 - 30 = 70\% = 0.70 \quad \begin{array}{r} 125 \\ \times 0.70 \\ \hline \end{array} \boxed{\$87.50}$$

12. Evan purchased a guitar for \$100. He wants to resell it at a 34% markup. What is the new cost of the guitar?

$$100 + 34 = 134\% = 1.34 \quad \begin{array}{r} 100 \\ \times 1.34 \\ \hline \end{array} \boxed{\$134}$$

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13. Jerry purchases a set of golf clubs that originally sells for \$345. If Dick's Sporting Goods is promoting their fall sale with a 15% discount and the city of Summerville has a 6% sales tax, then how much is Jerry paying for the golf clubs?  $0.06$

$$100 - 15 = 85\%$$

$0.85$

$$\begin{array}{r} 345 \\ \times 0.85 \\ \hline 293.25 \end{array}$$

$$293.25 \times 0.06 = 17.595$$

$$\begin{array}{r} 293.25 \\ + 17.595 \\ \hline 310.845 \end{array}$$

$$\boxed{310.85}$$