Unit 5 "Test" Review

Directions: For this test, always round to the nearest percent and always round to the nearest cent.

1.) You brought in 28 cans. Your goal was to collect 50 cans. What percent of your goal did you collect?

$$\frac{28}{50} = 0.56 = 56\% \text{ of the goal}$$

2.) You purchase a bike that is originally marked $200. When you get to the register you learn that there is a discount of 30% off plus an additional 10% of the discounted price. What is the final sale price (not including tax)?

$$200 \cdot 0.70 = \$140$$
$$140 \cdot 0.90 = \$126$$

3.) Your baseball card collection is currently 280 cards. By next year you hope to increase your collection by 40%. If you meet your goal, how many total cards will be in your collection?

$$280 \cdot 1.40 = 392 \text{ cards}$$

4.) You buy $28 worth of food. The sales tax is 6.75%. What is the total cost of the food and tax?

$$28 \cdot 1.0675 = \$29.89$$

5.) There are 9 red marbles, 6 green marbles, and 5 blue marbles. What percent of the marbles is NOT green?

$$\frac{14}{20} = 0.7 = 70\% \text{ are not green}$$

6.) A store is selling their jeans for 30% off. The jeans you picked out are originally $45. What is the sale price? What is the final price including 8% sales tax?

$$45 \cdot 0.70 = \$31.50 \qquad 31.5 \cdot 1.08 = \$34.02$$

7.) A car is on sale for $16,150. If the car was marked down 15% at this price, what was the original price of the car?

$$0.85x = 16,150 \qquad x = \$19,000$$

8.) You need $800 to be able to afford a new computer. If you take out a loan that charges 4.5% interest and it takes you 18 months to pay off the loan, how much interest must you pay?

$$800 \cdot 0.045 \cdot 1.5 = \$54$$

9.) If your bank account earns 2% interest on your current balance of $4,000, how much will be in your account if you keep the money in the bank for 10 years? (Hint: interest earned + previous balance)

$$4000 \cdot 0.02 \cdot 10 = \$800 \qquad 4000 + 800 = \$4,800$$

10.) You had $45 in your account last week. This week you have $80 in your account. What was your percent change?

$$\frac{35}{45} = 78\% \text{ increase}$$