Quiz for Lessons 6-5 Through 6-7

6-5 Applying Percent of Increase and Decrease

Find each percent of increase or decrease to the nearest percent.

1. from 40 to 55 **38% increase**
2. from 75 to 150 **100% increase**
3. from 110 to 82 **25% decrease**
4. from 87 to 25 **71% decrease**
5. A population of geese rose from 234 to 460 over a period of two years. What is the percent of increase, to the nearest tenth of a percent? **96.6%**
6. Mr. Simmons owns a hardware store and typically marks up merchandise by 28% over warehouse cost. How much would he charge a customer for a hammer that costs him $13.50? **$17.28**
7. A blouse and skirt that normally sell for $39.55 are on sale for 30% off the normal price. What is the discounted price? **$27.69**

6-6 Commission, Sales Tax, and Profit

Find each commission or sales tax to the nearest cent.

8. total sales: $12,500 commission rate: 3.25% **$406.25**
9. total sales: $14.23 sales tax rate: 8.25% **$1.17**
10. total sales: $25,000 commission rate: 2.75% **$687.50**
11. total sales: $251.50 sales tax rate: 7.5% **$18.86**
12. total sales: $10,500 commission rate: 4% **$420**
13. total sales: $75.99 sales tax rate: 6.125% **$4.65**
14. Tom sells sunglasses that he buys wholesale. He earns 75% profit on all sales. If total sales were $5250, what was the profit? **$3937.50**

6-7 Applying Simple and Compound Interest

Find the interest and the total amount to the nearest cent.

15. $225 at 5% per year for 3 years **$33.75; $258.75**
16. $775 at 8% per year for 1 year **$62; $837**
17. Leroy borrowed $8250 to be repaid after 3 years at an annual simple interest rate of 7.25%. How much interest will be due after 3 years? How much will Leroy have to repay? **$1,794.38; $10,044.38**
18. Hank borrowed $25,000 to remodel his house. At the end of 3 years, he had repaid a total of $29,125. At what simple interest rate did he borrow the money? **5.5%**
19. Akule borrowed $1500 at an annual simple interest rate of 12%. He paid $270 in interest. For what period of time did Akule borrow the money? **1.5 years or 18 months**
20. Erik invested $3000 in a savings account that pays 4% interest compounded quarterly. Find the value of the investment after 5 years. **$3660.57**