

## **Applied Percent of Decrease**

### **Classwork**

21. The population of your town was 14,500 people. The latest census indicates the population has decreased by 18%. What is the current population of your town?
22. A shirt that costs \$29.99 is on sale for 25% off. What is the sale price of the shirt?
23. Your bill at a restaurant is \$109.99. Since you are a frequent customer, the manager offers you a 15% discount. What is the amount of your discount?
24. The original price of a microscope is \$274.50. If you wait for it to go on sale for 30% off, what will the sale price be?
25. You purchase a new car for \$18,000. As soon as you drive it off the lot, it is considered a "used" car and loses 10% of its value. What is the value of the car when you drive it off the lot?
26. A motorcycle is valued at \$5,400. You buy it used for a 40% discount. What is the amount of money you save by purchasing it used?
27. A camera is on sale for 20% off its price of \$99.95. What is the sale price?
28. You have a coupon for 15% off the cost of an oil change. If the oil change is \$15.95, how much will you pay?

### **Homework**

29. You have \$20 and would like to purchase a sweater that is on sale for 35% off. The original price of the sweater is \$29.50. Can you afford to buy it on sale?
30. The population of a town in Vermont decreases during the winter by 22%. What is the population of the town during the winter if its population during the summer is 17,425 people?
31. As an employee, you get a 40% discount on all clothing purchased in the store. How much will you save if you purchase a jacket that sells for \$399.99?
32. You can buy a moped for \$6,000 brand new or you can buy one on Craigs List for a 5% discount. What is the cost of the moped on Craigs List?
33. The new computer you want to buy costs \$749.50. If you wait for it to go on sale for 17% off, what will the sale price be?
34. Your new cell phone cost \$425. After you drop it on the ground, it loses 35% of its value. What is the value of your cell phone after you drop it?
35. You have a coupon for 15% off any item in the store. If you purchase an item that costs \$33.95, how much will you pay?
36. What is the sale price of a car that is on sale for 24% off its list price of \$23,000?

## **Applied Percent of Increase**

### **Classwork**

37. A store purchases a sweater for \$40 then marks the price up 75% before selling it. What is the price of the sweater in the store?
38. Calculate an 18% tip on a \$84 bill.
39. A car costs \$34,500. How much sales tax will the customer pay if the tax rate is 7%?
40. A stadium is increasing its seating capacity by 35%. If the stadium currently holds 65,000 people, how many will it be able to hold after construction?
41. The population of your town has grown by 8% over the last year. If the population one year ago was 25,000 people what is the current population?
42. You have \$70 in your purse. Your bill at a restaurant is \$58. Do you have enough money to leave an 18% tip?
43. What is the total cost of a \$230 bicycle with 8% tax?
44. How much money do you spend on a \$55 dinner with a 20% tip?