Name:

## Date:

1. (a) Find $10 \%$ of 600 . (b) Using your first answer, find $20 \%$ of 600 . (c) Now find $5 \%$ of 600 .
2. 15 is what percent of 80 ?
3. (a) What percent of 172 is 84 ? (b) What percent of 84 is 172 ?
4. What is $2 \frac{1}{2} \%$ of 300 ?
5. 80 is what percent of 200 ?
6. What percent of 480 is 20 ?
7. $\quad 75$ is what percent of 50 ?
8. $160 \%$ of what number is 8 ?
9. $40 \%$ of 300 is equal to $15 \%$ of what number?
10. If $0.16 \%$ of the population were born on February 29 , how many people in a crowd of 4000 could be expected to have been born on February 29?
11. Jill's project paper for science is 8 pages long. Mark's paper is $125 \%$ of the length of Jill's paper. Find the length of Mark's paper.
12. $32 \%$ of the 50 states have names that begin with the letters M or N . How many states does is that?
13. Maddie gave 12 of her baseball cards to her little sister. If this was $15 \%$ of her collection, how many baseball cards did she have before she gave any away?
14. Adam needs to score $83 \%$ on his math final to get a B in the class. If the final is worth 150 points, how many points does he need?

## Finding Percent and Percent Increase or Decrease

15. A car dealership agrees to cut $5 \%$ off the $\$ 26,988$ sticker price of a new car for a customer. What price does the customer pay?
16. A table is on sale for $15 \%$ off the regular price of $\$ 299$. What is the sale price?
17. What is the percent increase on a shirt that is marked up from $\$ 12$ to $\$ 15$ ?
18. What is the percent decrease on a shirt that is marked down from $\$ 15$ to $\$ 12$ ?
19. A population of deer rose from 82 to 110 in one year. By what percent did the population increase?
20. The percent increase from 7 to 8 is equal to the percent decrease from 147 to what number?
21. The percent decrease from 32 to 24 is equal to the percent increase from 456 to what number?
22. A Halloween costume is originally priced at $\$ 50$. It is marked down by $10 \%$ after one week, and is reduced an additional $25 \%$ after two weeks. What is the price of the costume after two weeks?
23. The cost of a new Jeep increased $8 \%$ from 2008 to 2009. The cost increased another $5 \%$ from 2009 to 2010. By what percent did the cost increase between 2008 and 2010?
24. A box can hold 50 total packs of gum. It is originally stocked with $60 \%$ cinnamon-flavored packs and $40 \%$ strawberry-flavored packs. If the original number of cinnamon-flavored packs is decreased by $40 \%$ and the box is refilled to capacity with strawberry-flavored packs, then the increase in the number of strawberry packs is what percent of the original number of strawberry packs?
