Name: $\qquad$ Period: $\qquad$

## Percent Proportion Word Problems

Directions: Solve each word problem. Show each proportion and label each answer.

1. The movie theater has 250 seats. 225 seats were sold for the current showing. What percent of seats are empty?
2. A class of sixty voted for class president. 30\% voted for Brad and $70 \%$ voted for Jane. How many votes did the winner get?
3. A survey of 1,000 people was done by New York Times. $80 \%$ of the people did not know the name of their representative in Congress. How many of the 1,000 people knew the name of the Congressman?
4. Bill is in a class of 15 boys and 35 girls. $40 \%$ of the students in the class take the bus to school. How many students do not take the bus to school?
5. Miss Holman gave a 90 -cent tip to a waitress for serving a meal costing $\$ 6.00$. What percent of the bill was her tip?
6. In the Central City Grand Prix, out of 30 cars that started the race, 12 of them finished. What percent of the cars finished the race? What percent did not finish the race?
7. No-Freeze antifreeze mixture contains $30 \%$ alcohol. How much alcohol is there in 15 quarts of No-Freeze?
8. Eric earned 60 points on his last test. If there were 75 possible points, what was his percent grade?
9. Restaurant etiquette dictates that you should leave a $15 \%$ tip for the server if the service is acceptable. If that is the case, how much should you tip if your total is $\$ 24.00$ ?
10. Last night, the Knicks made 12 free throws. If their free throw percentage is $75 \%$, how many free throws were attempted?
11. Dr. Hall files 320 insurance claims every month. If $5 \%$ of those claims are rejected, how many claims are rejected? How many are accepted?
12. On an 88 question test, LeeBeth missed 11 questions. What is her exact grade for that test?
13. Phillip sells electronics and works on a commission basis. If his commission is $4 \%$, and he sells $\$ 15,000$ worth of electronics, what are his earnings?
14. The produce department of a grocery store sold 288 pounds of tomatoes. The weight represented $72 \%$ of the shipment the store received. The rest spoiled and had to be discarded. How many pounds of tomatoes were originally received?
15. A chimp is taking a multiple-choice test. Of course the chimp can't read and is guessing for every question. If there are 4 choices for each question, and there are 84 questions on the test, how many questions can we expect the chimp to answer correctly? (hint: There is a $25 \%$ chance that the chimp will guess correctly.)
16. A photograph is reduced to $75 \%$ of its original size. The photo was originally 12 inches by 16 inches. What are the new dimensions after it has been reduced $75 \%$ ?
17. Donnovan earned 99 points on his science project. If his grade was a $90 \%$, how many points were possible?
18. A waiter received a $\$ 5.25$ tip. If the check totaled $\$ 25$, what percentage was received?
19. Kyle often pretends to take showers. He was told 330 times to take a shower, but only took one 264 times. What percentage of the time did he pretend to take a shower?
20. In a volleyball game, Caroline served the ball over the net 16 out of 20 times. What percent did she not make her serve over the net?
