## Section 3.5 Focus Exercises

## You will need to do each of these on your own paper.

1. For each sentence, identify the unknown, write a legend for it and set up its equation. Solve the equation and write a short sentence of conclusion.
a) What percent of 45 is 27 ?
b) What percent of 96 is 36 ?
c) What percent of 45 is 72 ?
d) What percent of 96 is 120 ?
e) $75 \%$ of what number is 48 ?
f) $40 \%$ of what number is 30 ?
g) $120 \%$ of what number is 84 ?
h) $125 \%$ of what number is 80 ?

Solve each of these by creating a legend, setting up and solving the equation and writing a sentence of conclusion.
2. Brian sells exercise equipment in a sporting goods store. He receives a $4 \%$ commission on everything he sells.
a) How much commission will Brian make if his sales, on Saturday, total $\$ 2,300$ ?
b) Brian figures that he needs to make about $\$ 125$ per day to meet all of his expenses. How much must he sell in a day to make that commission?
3. Of the 85 chiropractic patients that Dr. James sees regularly, 34 of them get a weekly massage. What percent of his patients get a weekly massage?
4. This year, business at $\mathcal{F}$ it as a $\mathcal{F i d d l e}$, a music instrument store, was so good the owner had to hire 6 new employees. That's a 30\% increase over last year. How many employees did Fit as a Fiddle have last year?
5. $68 \%$ of the voters in a larger town were in favor of Measure $B$ on their ballot. If 272 people were in favor of Measure B, how many total people voted in this town?
6. Karin is the Math and Science department chair at Quarry Bluffs Community College. Her department has 20 full-time members in a campus that has 75 full-time faculty. What percentage of the full-time faculty is in Karin's department?
7. $16 \%$ of the faculty at Cedar Glen College teach English. If there are 24 English instructors, how many total faculty are there?
8. $15 \%$ of the women members of a health club are married. If there are 40 married women members at the club, what is the total number of women members?
9. Louie made a record of all of the faculty computers on his campus. Of the 150 computers, 47 of them are Macintosh. What percent of the faculty computers are Macs?
10. In a small town, 176 of the 330 voters voted for Becky Kendall for mayor. What percent of the vote did Ms. Kendall get?

