$\qquad$
$\qquad$ Hour

## Worksheet 3.8 - Rates, Ratios, and Percents - Textbook pages 180-186

## LEVEL 1

Find the unit rate. Show your work.

1) $\$ 4$ for 5 cans of vegetables.
2) $\$ 65.25$ for working 9 hours

Solve each problem. Show your work.
3) what number is $35 \%$ of 210
4) 85 is what percent of 125
5) what number is $48 \%$ of 68
6) 45 is $30 \%$ of what number

## LEVEL 2

Find the average speed. Show your work.
7) Fly 1500 miles in 4 hours 8) Walk 1.2 miles in 15 minutes

Find the percent. Show your work. Round your answer to the nearest whole percent.
9) $\$ 5.15$ tip on a $\$ 28.50$ restaurant bill.
10) Tax of $\$ .59$ on an item priced at $\$ 9.85$

## LEVEL 3

11) A concert sold out in 6 hours. A total of 9570 tickets were sold for the concert. At what rate did the tickets sell? Show your work.
12) The local automobile dealer has 230 vehicles on the lot. Of the 230 vehicles 133 are used. What percentage of vehicles are used on this dealers lot? Show your work. Round your answer to the nearest whole percent.

## LEVEL 4

13) You have recorded your car mileage and gasoline use for several weeks on the table below

| Week | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | :---: | :---: | :---: | :---: |
| Number of miles | 320 | 195 | 240 | 280 |
| Number of gallons | 12.5 | 7.4 | 9.6 | 10.8 |

a) Find the average consumption in miles per gallon for the 4 -week period. Show your work.
b) Use your answer in part a to estimate the number of miles you can drive on 15 gallons of gasoline. Show your work.
14) On an N-gauge model train set, a tank car is 3.75 inches long. An actual tank car is 50 feet long. What is the ratio of the length of the actual tank car to the length of the model tank car? Show your work.

