

# Algebra 1 Classwork after Quiz for Sec 5-2 & 5-3 Name:

Write an equation and define your variables to model each situation.

1. The amount of money you raise is a function of how many miles you walk. People have pledged a total of \$7.50 for every mile you walk.

EQ:

Variables:

2. A Regular Polygon has sides that are equal in length. The perimeter of a Regular Pentagon is a function of the length of each side.

EQ:

Variables:

3. The amount of money in your account is a function of how many deposits you've made. You had \$136 in your account then deposit \$15 each week.

EQ:

Variables:

4. The amount of your phone bill each month is a function of the number of minutes beyond 100 that you use each month. Your phone company has the following charges: \$55 per month plus \$0.25 for every minute after the first 100 minutes each month.

EQ:

Variables:

5. The amount of tax you owe in the State of Michigan when you purchase an item is a function of the price of the item. The sales tax in Michigan is 6%.

EQ:

Variables:

For each of the tables below write an equation that gives the y-values shown in the table when you input the given x-values.

6. EQ:  $y =$

| $X$ | $Y$ |
|-----|-----|
| -3  | -5  |
| -1  | -3  |
| 1   | -1  |
| 4   | 2   |
| 7   | 5   |

7. EQ:  $y =$

| $X$ | $Y$ |
|-----|-----|
| -4  | -6  |
| -2  | -3  |
| 0   | 0   |
| 6   | 9   |
| 8   | 12  |