Direct Variation Word Problem Worksheet

Name: _____ Due Date: _____

For each problem below, answer the question that is stated, then state the constant of variation for each problem and write an equation in $y = kx$ **form to represent the problem.**

1. y varies directly as x. If $x = 5$ when $y = 12$ find x when $y = 30$.

2.   Heather's weekly pay is directly proportional to the number of hours she works at the record store. Her pay is $174 for 24 hours of work. Find the amount of pay for 40 hours of work.

3.   Eduardo counted ten seconds between seeing lightning and hearing thunder, and he knew that the lightning was about 2 miles away. If he counted four seconds between the next flash of lightning and thunder, about how far away was the lightning?

4. A person's weekly pay is directly proportional to the number of hours worked. Shawn's pay is $123.00 for 20 hours of work. Find the amount of pay for 31 hours of work.

5. At top speed, a rabbit can cover 7 miles in 12 minutes. If a rabbit could continue at this rate indefinitely, how long would it take the rabbit to cross the 220-mile expanse of the Mojave Desert?

6. A dishwasher uses 65 gallons of water to wash 5 loads of dishes. How many gallons of water would be used to wash 12 loads?

Choose any four problems from above to graph on the graphs provided below. Number each graph with the corresponding problem number, and be sure to give each graph a title and to number and label each of the axes.