Name:_____ Date:_____ Per:_____ Folder #: _____

Math 7 Unit 4 Study Guide

Directions: Answer each question completely. <u>Show ALL work</u> to defend your answers.

1. Solve the proportion $\dfrac{x}{12} = \dfrac{25}{75}$

2. Mr. Harrington drove 528 miles in 9 hours. What is his average rate of speed to the nearest (mph)?
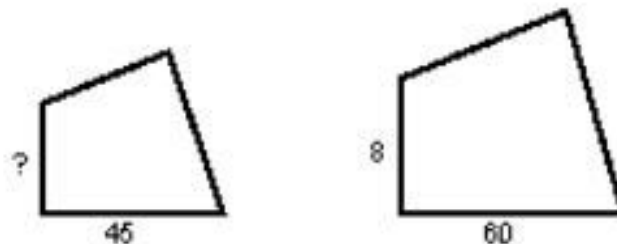
3. One batch of cookies requires two eggs and two and a half cups of flour. How many cups of flour are needed to make three and a half batches of cookies? Write and solve a proportion.

    a. How much flour do we need? _____

    b. How many eggs should we use? _____

4. According to the scale on a map, 1 inch on the map = 16 miles. How many inches on the map would represent 24 miles?

5. The shapes below are similar. Use proportions to solve for the variable and find the length of the missing side.

6. Jennifer babysat for 6 hours and earned $43.50. What is her hourly rate of pay? Is this a proportional relationship? Why or why not? Create a table, a graph, and a rule to justify your answer.