

Pre Algebra
Unit 1 Problem Set 5

Name: _____
Hour: _____ Date: _____

- 1) Adam wants to rent a car. To rent a car from Auto Zoom, he would have to pay a daily rental fee of \$75 as well as \$0.15 for each mile driven. If instead he goes to Casey's Rent-a-Wheel, he can get a car with a rental fee of \$65 a day and a cost of \$0.25 per mile.
 - a) If Adam takes a trip out of town and drives 750 miles over four days, how much would he pay under each plan in rental fees?
 - b) Which company should Adam rent from?
 - c) If Adam was only going to drive around town for the four days and drive a total of only 100 miles, then guess which company Adam should rent the car from?
 - d) Now prove your answer by solving the rental fee problem for both Auto-Zoom and Casey's Rent-a-Wheel for four days and at 100 miles:
- 2) The three crews at Imber Loading and Shipping can each load a truck in a $\frac{1}{4}$ hour. Each crew works from 7 AM to 3 PM with an hour off for lunch and two 15 minute coffee breaks. How many trucks can these three crews load in one workday?

3) Katie's Porsche gets 15 miles to the gallon in the city and 24 miles to the gallon on the highway. She travels from Wakawakawoo to Toupee Falls which is 25 miles. She travels at an average of 30 miles per hour. During the trip she stops for a 1/2 hour break at Chuncky Burger to get herself a bowl of Peanut Butter and Jelly Soup and some Onion Rings. She also gets a glass of Goat's Milk.

a) How much time will it take her to complete the trip?

b) How much will the food cost (with 6% tax)?

c) How much gas will she use for the trip?

d) If gas is \$1.49 a gallon at Stevoco, how much will she pay for gasoline?

e) Katie rented the car she used from Auto Zoom. Assuming one day for a rental fee, what would be the cost of renting the Porsche?

f) What was the total cost of the whole trip?