Date .	
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Period

<u>Unit 2 Quiz 2 Review</u> <u>Math & Your Car</u>

<u>Directions</u>: Show all your work. If necessary, round final answers to the nearest <u>hundredth.</u>

1) Ana has car insurance with a \$300 premium every six months and a \$900 deductible.

- a) How much would Ana pay in a six month period if she had an accident that cost \$1,500 to repair?
- b) How much would Ana pay in a six month period if she had an accident that cost \$500 to repair?
- c) Suppose that Ana had a car accident that cost \$2,000 to repair, but the other driver was the one at fault. How much would Ana pay in the six month period?

2) Name 3 additional costs associated with owning a car (not including car insurance). How can you try to reduce these costs?

Additional Cost of Owning a Car:	How can the cost be reduced?			

3) Drivers from three different age groups were asked to identify what they thought was most important when buying a car. Use the following augmented bar graph to answer the following questions:



- a) Which of the responses is most common among all respondents?
- b) Which of the responses is least common among people in the 16-30 age group?
- c) What is the percentage of the 31-50 age group that saw appearance as the least important aspect of choosing a car?

- 4) The distance from Saugerties, NY to the Jersey Shore is about 194 miles.
 - a) How long would it take you to get there if you drove 65 mph?

b) How long would it take you to get there if you drove 75 mph?

c) How much time (to the nearest minute) would you save by driving 65 mph instead of 75 mph?

5) Matthew went on a trip to Bennington, VT. He drove for 2 hours at 65 mph, stopped for a break, then drove another 2 hours at 55 mph. Finally after dinner, he drove another hour at 65 miles per hour. What was the total distance he drove?

6) Complete the table to find the percentage of fatal crashes that are alcohol-related—**round to the** <u>**nearest percent**</u>.

<u>Time of Day</u>	<u>Number of Fatal</u> <u>Crashes</u>	<u>Number of</u> <u>Alcohol-Related</u> <u>Crashes</u>	<u>Percent of</u> <u>Alcohol-Related</u> <u>Fatal Crashes</u>
Midnight to 6 am	7,492	5,467	
6 am to noon	7,165	914	
Noon to 6 pm	11,050	2,391	
6 pm to midnight	11,320	6,264	

7) Draw a histogram to show a relationship between time of day and percentage of fatal crashes that are alcohol-related. (Refer to question #6).