

Name:

Period:

Unit 2 Final Exam Review: Math & Your Car

Directions: Show all work. If necessary, round to the nearest cent (unless the question states otherwise)

1. You are taking out a 3 year car loan for a \$30,000 car. The interest rate is 7.25%. Use the TVM Solver on the graphing calculator to answer the following question (APPS → 1 → 1)

N=

I% =

PV =

PMT =

FV =

P/Y = 12

C/Y = 12

a. What will you pay each month for this car?

b. What is the total price you will pay for this car over 3 years?

c. How much interest will you pay on this car loan?

2. You are taking out a 5-year car loan for a \$50,000 SUV. The interest rate is 4.5%. Use the TVM Solver on the graphing calculator to answer the following question (APPS → 1 → 1)

N=

I% =

PV =

PMT =

FV =

P/Y = 12

C/Y = 12

a. What will you pay each month for this car?

b. What is the total price you will pay for this car over 3 years?

c. How much interest will you pay on this car loan?

3. You are trying to determine if your car receives an average gas mileage of 20 miles to the gallon. You fill up your gas tank, drive 225 miles and fill up your tank again. To refill your tank, it took 11 gallons of gas.
 - a. What was your gas mileage?
 - b. Did your car perform as well as advertised?
4. Your gas tank holds 28 gallons of gas. If your car gets 23 miles per gallon, how far can you travel on a tank of gas?
5. You are taking a trip which is 800 miles. Your car gets 24 miles per gallon.
 - a. How much gas will you need for the trip (round your answer to the nearest tenth)?
 - b. If gas cost \$4.15 per gallon, how much will the gas for the trip cost?
6. The distance from Saugerties to Indianapolis, IN is about 783 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 55 mph?
 - c. How much time (to the nearest minute) would you save by driving 65 mph instead of 55 mph?

7. Matthew went on a trip to Myrtle Beach, SC. He drove for 3 hours at 65 mph, stopped for a break, then drove another 3 hours at 55 mph. Finally after dinner, he drove another 2 hours at 65 mph. What was the total distance he drove?

8. Anna has car insurance with a \$1,550 premium every six months and a \$500 deductible.

a. How much would Anna pay in a six month period if she had an accident that was her fault and cost \$2450 to repair?

b. How much would Anna pay in a six month period if she had an accident that was her fault and cost \$425 to repair?

c. How much would Anna pay in a six month period if she had an accident that cost \$1000 to repair but the other driver was at fault?