

Word Problems

1. **a.** Mick can drive his car 33 miles with one gallon of gas. How much gas does he need to drive 15,000 miles (his annual mileage)?
- b.** If gasoline costs \$3.06 per gallon, what is Mick's annual cost of gasoline?
2. Dad wants to buy a car. In his purchase he is considering the price of the car, and the gas mileage of the car he is going to buy. The chart shows the price and the gas mileage for four cars he is considering buying. MPG (city) means Miles Per Gallon when driving in a city, and MPG (hwy) means Miles Per Gallon when driving on highway.

	Car A	Car B	Car C	Car D
Price	\$22,150	\$24,900	\$30,990	\$22,900
MPG (city)	25	49	57	30
MPG (hwy)	34	51	56	34
Annual Gasoline Usage (gallons)				
Annual Gasoline Cost				

Dad estimates that within each 12 months, he will drive about 12,000 miles. Also he estimates that half of that will be city driving, and half will be highway driving.

- a.** Calculate the amount of gas each car would use in the next 12 months, if Dad bought that car.
- b.** Calculate the cost of the gasoline each car would use within the next 12 months. Use \$3.06 per gallon for gas price. Record your numbers in the table above.
- c.** Do the same for the following 12 months, using \$3.11 for the gas price.

- d.** Do the same for three more 12-month periods, using \$3.14, \$3.18, and \$3.25 for gas prices on subsequent years.

Find the total cost of buying each car and its gasoline costs for 5 years after purchase.

Write your results in the table provided here.

Which car is the most economical within 5 years?

	Car A	Car B	Car C	Car D
Initial price				
Gasoline cost, year 1				
Gasoline cost, year 2				
Gasoline cost, year 3				
Gasoline cost, year 4				
Gasoline cost, year 5				
Totals				