



LEANNAH LESLIE, Newspapers in Education Coordinator
The Independent, 226 Seventeenth Street, P.O. Box 311
Ashland, KY 41101-0311 Phone (606) 326-2683 or 1-800-955-5860



Cars + Math + Newspapers = Learning Fun



A math learning packet for
middle school students

WANT TO BUY A CAR?

The activities in this math booklet will help you in purchasing a new car. Let's pretend you are going to buy your first car. Even if you have your dream car in mind, studying the advertisements is a good way to determine what appeals to you and what the cars are available.

To begin the exercise, find the automobile advertisements in your local newspaper.

Ads! Ads! Ads!



1. List ten of the selling words advertisements use to attract the reader's attention.
2. Display ads are the goods and services offered by the retail stores and the marketed products and services. Look through the display ads of the newspaper. Look for a decimal numeral of four places or greater. Express the number in expanded notation. Example: \$2,799.99 = Two thousand + seven hundred + ninety + nine dollars and ninety nine cents.
3. The demand for small economy cars is increasing because of the high cost of gasoline. Can you find an auto advertisement in the newspaper that promotes fuel efficiency or lists its mileage rating in the city and on the highway?
4. You have \$960 in your promotional account to design a one half page black and white advertisement for your newly opened car dealership. Study the advertisements in the newspaper and then design your own creative ad to catch the reader's attention.

PRICE COMPARISON — SHOP AROUND!



1. Write five greater than and less than problems using the prices of the automobiles in the newspaper ads.
2. Search the auto section of the classified ads for the most expensive and least expensive used car. Calculate the difference between the two amounts. Next, find the average price of the two cars.
3. Can you find the same car on sale at two different dealers whose sale price is not the same?
4. Look through the used car prices in the classified section. Next pick six different kinds of cars and design a bar graph to illustrate the different asking prices.
5. Write down the prices of five cars you like. Round each price to the nearest hundred. Compute the average price. Next, figure the median.
6. Look at the classified advertisements for used autos that are at least ten years old. On a line graph show the frequency of ads of different makes.





FINANCING

You have found your dream car, however, now you have to pay for it! The following Questions will test your math skills.

1. Round off the price of your dream car to the nearest thousand. The car dealership requires that you pay 20% of the list price of the car. How much money will you pay up front?
2. You need to take out a loan to finance the balance of your bill. Shop the loan agency ads. Look through the ads to find the interest rates of a car loan. What are the interest rates at three different banks or car dealerships?
3. What will the total cost of your car be if you put down 20% and finance the balance over a period of 24 months, paying 12% interest? What will your monthly payments be?
4. More costs still! Add a 8% sales tax to the list price of the car. What is the total cost of your car now?
5. In our state we also have an excise tax, which your town receives to help pay for the roads. Excise tax is paid at the rate of \$25 per thousand. Compute your excise tax. Begin with 90% of the list price of the car.

Example: List price \$8,000 x 90% = \$7,200

\$25 x \$7,000 = \$175

6. Pick any car from the classified ads that you would most like to sell. Pretend you will make a 13% commission if you sell that car. Determine the commission you would make if you sold the car for \$11,000.

MAINTENANCE



1. Car parts, gasoline and maintenance are big expenses in owning an automobile. Locate five stores that are advertising tires. Design a bar graph of the five different types and costs of each.
2. Study the automobile service advertisements in the newspaper. Make a list of all the services offered.
3. Find out how much it costs to have tires aligned at two different places.
4. Using a car advertisement that gives an estimate of gasoline used miles per gallon, determine the cost of driving from your city to another city at the price of \$3.24 per gallon of gasoline.



***NOW YOU ARE ALL SET TO PURCHASE A CAR!
COMPUTE HOW MANY DAYS IT WILL BE
UNTIL YOU GET YOUR LICENSE!***

NAME: _____

Look through the used car prices in the classifieds section. Pick six different kinds of cars and design a bar graph to illustrate the different asking prices. Give the year of the car from the newest to the oldest.

	NEWEST					OLDEST
\$10,000						
\$9,000						
\$8,000						
\$7,500						
\$7,000						
\$6,500						
\$6,000						
\$5,500						
\$5,000						
\$4,500						
\$4,000						
\$3,500						
\$3,000						
\$2,500						
\$2,000						
\$1,500						
\$1,000						