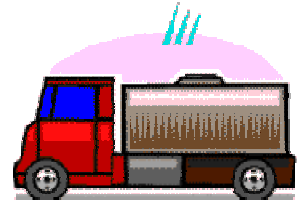




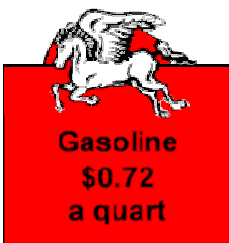
Conserving Fuel



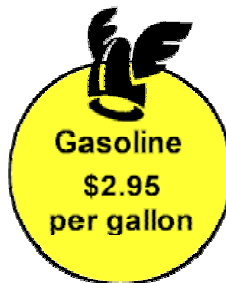
In cold climates, conservation of fuel is always a high priority. This is especially true regarding gasoline for vehicles and heating fuel for homes.

The Vehicle:

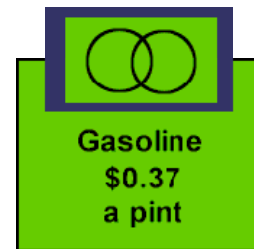
1. Gas stations can become very creative when trying to make their product sound cheaper than their competitors. Three stations list the price of their gasoline as seen below. Which station is really offering the cheapest gasoline? _____ Show your work.



Station 1



Station 2



Station 3

2. Jen and Steve have been next-door neighbors since they were in kindergarten. They are now both attending college at the same university. Jen drives a Chevy Cobalt which gets 28 miles to the gallon and Steve drives a Ford Explorer SUV which gets 18 miles to the gallon. The university is 350 miles from their homes. Purchasing gasoline from the gas stations in question 1, how much would it cost them to drive home from college? Complete the chart. Show all work.

Gas Station	Jen	Steve
\$0.72 a quart	\$	\$
\$2.95 per gallon	\$	\$
\$0.37 a pint	\$	\$

The Home:

1. During a roof repair, your attic insulation was partially removed. In an attempt to conserve heating fuel, you decide to replace the attic insulation. The attic space you wish to insulate measures 35' by 40'. You decide to purchase the blanket style insulation (the kind advertised by the pink panther). This insulation comes in 24" wide rolls that are 30 feet long. How many rolls of insulation are needed for this attic project? _____ Show your work.



2. In an attempt to further conserve heating fuel, you place weather-stripping around your exterior doors. Weather-stripping is not placed across the bottom of the doorway. Your home has three exterior doors. Two of the doors measure 6' 8" by 3' and the other measures 6' 8" by 2' 6". Show all work.

a. How many inches of weather-stripping would you need to purchase? _____

b. If purchased off a roll, the weather-stripping is sold by the foot. How many feet would you need to purchase? _____

c. A retail store sells weather-stripping pre-packaged in 13 foot rolls. How many packages would you need to purchase? _____