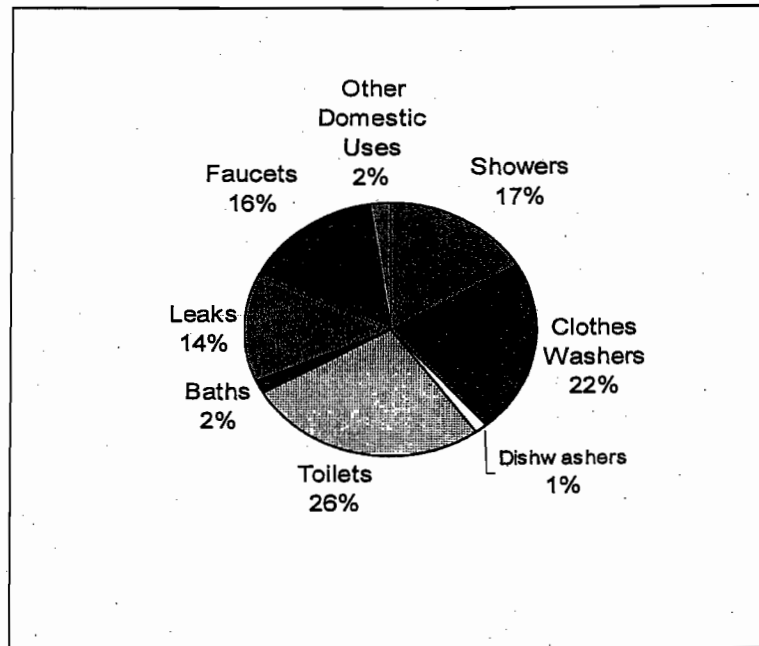# MTH 102

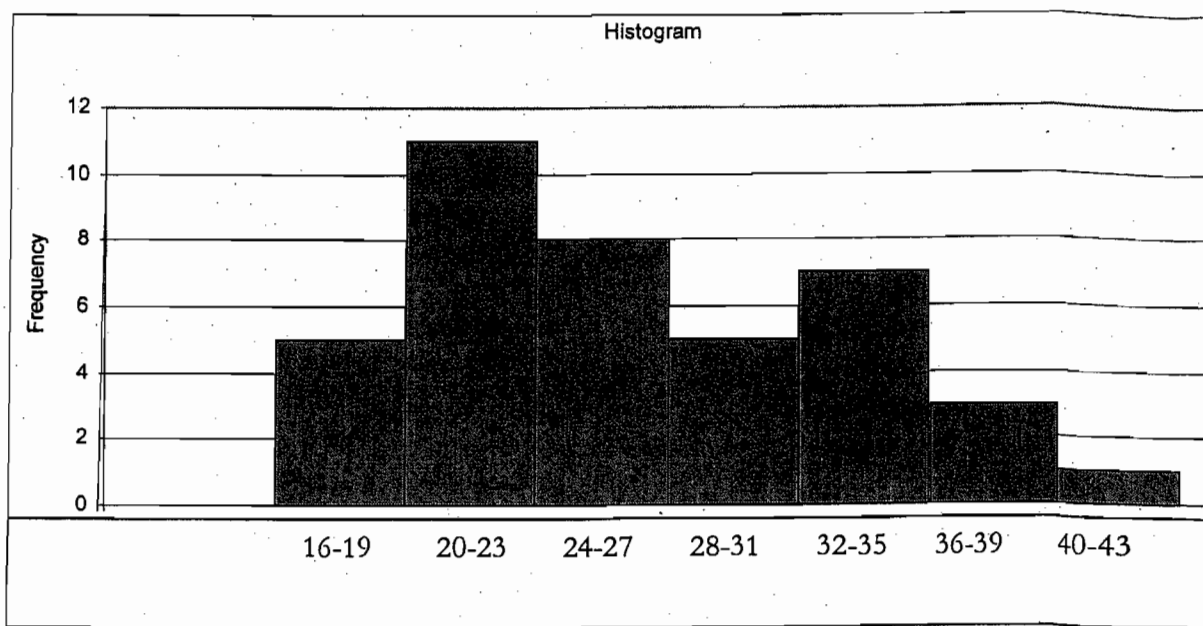# Quiz for Supplemental Material

Water Usage

1. If the chart represents one month in June in a typical Staten Island household using a total of 26,000 gallons of water during the month, find:

    a) the number of gallons wasted in June from leaks

    b) the price of your bill in June if you pay $.0014 per gallon of water

    c) how many less gallons were used for baths than showers

    d) how many gallons of water are used *weekly* on average by washing clothes

    e) the ratio of gallons of water used in June by the dishwasher compared to other domestic uses

2. If you install a water-saving toilet you will reduce daily household water usage by 8.2 gallons of water per person per day (on average). If there are four persons in the family, how many gallons will be saved in June?

3. What is the % decrease by installing this water-saving device?

.4. The table below at the right represents the number of miles per gallon of gasoline obtained by 40 drivers of compact cars in a large city.

Histogram

Mileage (miles per gallon) for compact cars

a) How many cars get at *least* 28 miles per gallon?_____

b) In Which interval does the mode lie?_____

c) What percent of the cars reported mileage's from 24 to 27 miles per gallon?_____

5. The yearly enrollment at a school over a three-year period is shown in the accompanying graph. Show all calculations to support your answers to the following questions.

      a)   During which two-year period, 1980-1981 or 1981-1982, was the increase in enrollment the largest?

      b)   During which two-year period was the percent increase in enrollment the largest? -----

Yearly Enrollment

	1980	1981	1982
Enrollment	7000	10000	14000