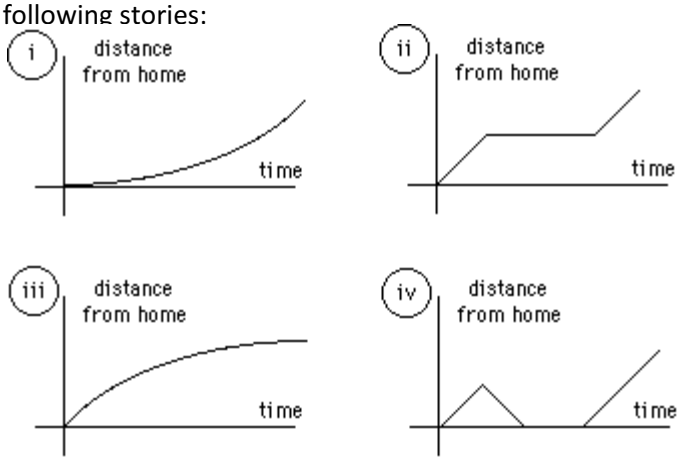
AP Environmental Science Graph Prep

Practice Interpreting Data:

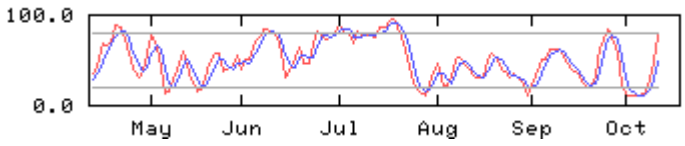
The following questions are to help you practice reading information shown on a graph. Answer each question on the separate answer sheet.

1. Identify the graph that matches each of the following stories:
   a. I had just left home when I realized I had forgotten my books so I went back to pick them up.
   b. Things went fine until I had a flat tire.
   c. I started out calmly, but sped up when I realized I was going to be late.

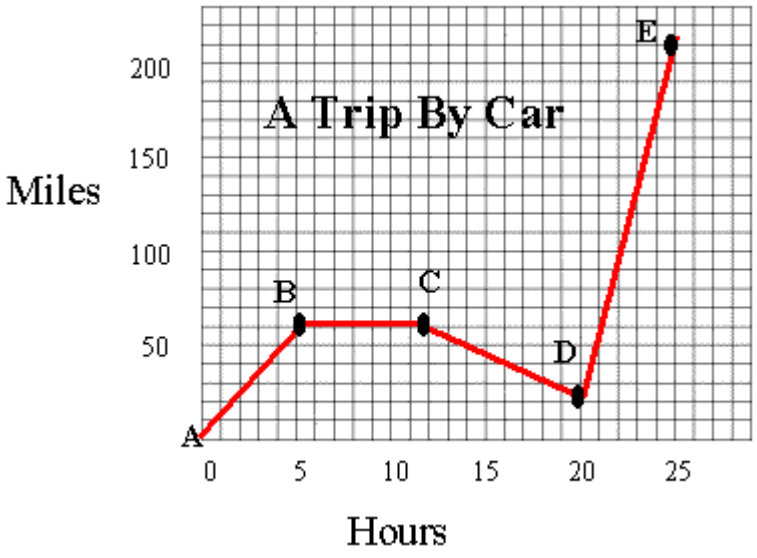


2. The graph at the right represents the typical day of a teenager. Answer these questions:
   a. What percent of the day is spent watching TV?
   b. How many hours are spent sleeping?
   c. What activity takes up the least amount of time?
   d. What activity takes up a quarter of the day?
   e. What two activities take up 50% of the day?
   f. What two activities take up 25% of the day?

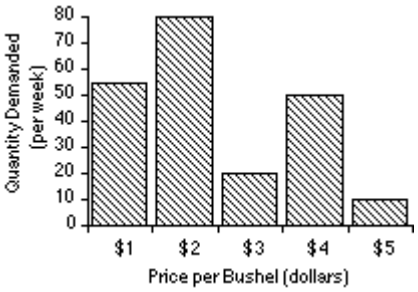
3. Answer these questions about the graph at the right:
   a. How many sets of data are represented?
   b. On approximately what calendar date does the graph begin?
   c. In what month does the graph reach its highest point?



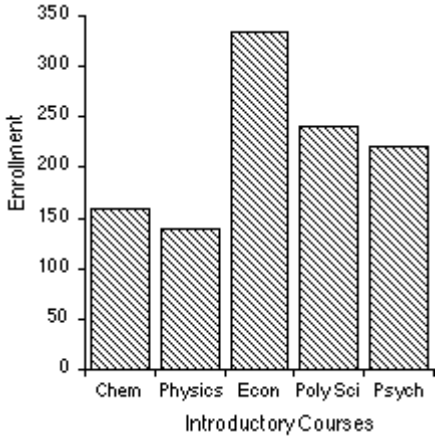
4. Answer these questions about the graph on the right:
    a. How many total miles did the car travel?
    b. What was the average speed of the car for the trip?
    c. Describe the motion of the car between hours 5 and 12?
    d. What direction is represented by line CD?
    e. How many miles were traveled in the first two hours of the trip?
    f. Which line represents the fastest speed?



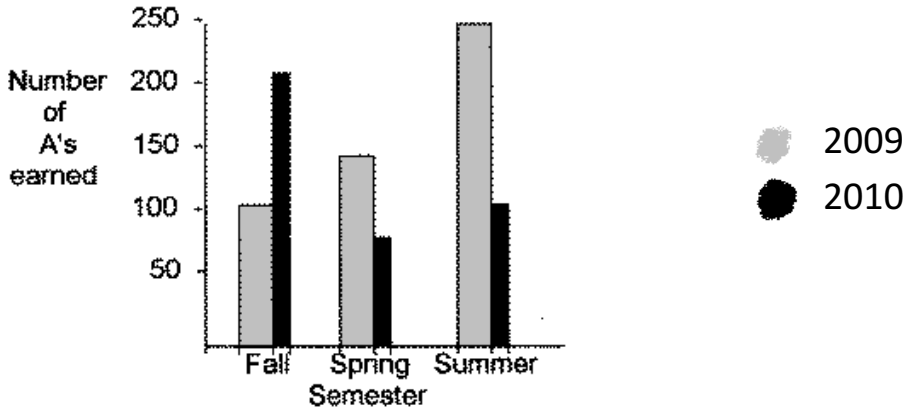
5. Answer these questions about the graph at the right:
    a. What is the dependent variable on this graph?
    b. Does the price per bushel always increase with demand?
    c. What is the demand when the price is 5$ per bushel?



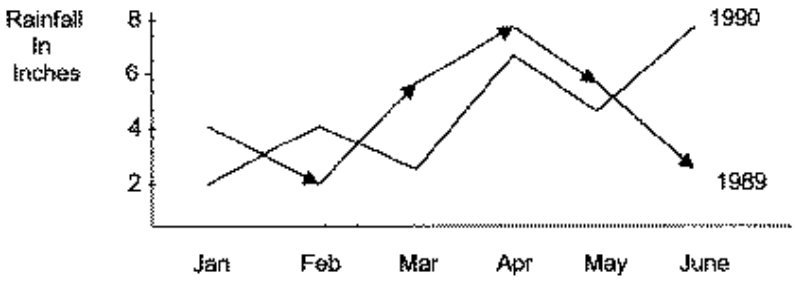
6. The bar graph below represents the declared majors of freshman enrolling at a university. Answer the following questions:
    a. What is the total freshman enrollment of the college?
    b. What percent of the students are majoring in physics?
    c. How many students are majoring in economics?
    d. How many more students major in poly sci than in psych?



7. This graph represents the number of A's earned in a particular college algebra class. Answer the following questions:
    a. How many A's were earned during the fall and spring of 2009?
    b. How many more A's were earned in the fall of 2010 than in the spring of 2010?
    c. In which year were the most A's earned?
    d. In which semester were the most A's earned?
    e. In which semester and year were the fewest A's earned?



8. Answer these questions about the graph below:
    a. How much rain fell in Mar of 1989?
    b. How much more rain fell in Feb of 1990 than in Feb of 1989?
    c. Which year had the most rainfall?
    d. What is the wettest month on the graph?



9. Answer these questions about the data table:

a. What is the independent variable on this table?
b. What is the dependent variable on this table?
c. How many elements are represented on the table?
d. Which element has the highest ionization energy?
e. Describe the shape of the line graph that this data would produce?

Atomic Number	Ionization Energy (volts)
2	24.46
4	9.28
6	11.22
8	13.55
10	21.47

10. Answer the following using the data table below:

a. How many planets are represented?
b. How many moons are represented?
c. Which moon has the largest mass?
d. Which planet has a radius closest to that of Earth?
e. How many moons are larger than the planet Pluto?
f. Which of Jupiter's moons orbits closest to the planet?
g. Which planet is closest to Earth?

Solar System Data Table

Name	Orbits	Distance (000 km)	Radius (km)	Mass (kg)
Sun			697000	1.99×10^{30}
Jupiter	Sun	778000	71492	1.90×10^{27}
Saturn	Sun	1429000	60268	5.69×10^{26}
Uranus	Sun	2870990	25559	8.69×10^{25}
Neptune	Sun	4504300	24764	1.02×10^{26}
Earth	Sun	149600	6378	5.98×10^{24}
Venus	Sun	108200	6052	4.87×10^{24}
Mars	Sun	227940	3398	6.42×10^{23}
Ganymede	Jupiter	1070	2631	1.48×10^{23}
Titan	Saturn	1222	2575	1.35×10^{23}
Mercury	Sun	57910	2439	3.30×10^{23}
Callisto	Jupiter	1883	2400	1.08×10^{23}

Io	Jupiter	422	1815	8.93×10^{22}
Moon	Earth	384	1738	7.35×10^{22}
Europa	Jupiter	671	1569	4.80×10^{22}
Triton	Neptune	355	1353	2.14×10^{22}
Pluto	Sun	5913520	1160	1.32×10^{22}