Who's Left?

As their topic for a group project, Chen, Shana and Jim decide to investigate how many people are left-handed. Since every seventh-grader takes math, they survey each class and record the following data:

Math Class	Students in Class	Left-Handed Students
7A	17	3
7B	26	5
7C	19	1
7D	22	2
7E	22	5
7F	12	3
7G	28	3
7H	25	5
7I	27	4
7J	30	3
7K	11	2
7L	19	2

1. a. How many students are in the 7th grade? What percentage of them are left-handed?

b. How can you use this information to estimate the number of left-handed people in a different group?

c. There are 917 students in the school. About how many of them would you expect to be left-handed?

There are 311 students in the 6th grade. About how many of them would you expect to be left-handed?

There are 23 students in the first period French class. About how many of them would you expect to be left-handed?

d. Which of the answers in part **c** do you expect to be closest to the actual number? Why?

2. a. Plot the given data on graph paper. Each 7th grade math class should be represented by a point. Put the number of students in each class along the horizontal axis, and the number of left-handed students along the vertical axis.

b. A news story reports that 1 out of every 7 people is left-handed. Using this information, plot the expected number of left-handed people for three different-sized groups on the same graph, and connect these three points with a straight line.

How can you tell from your graph which math classes have above-average numbers of left-handed students, and which have below-average numbers?