Common Core Math 1 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Univariate Data Date \_\_\_\_\_\_\_\_\_\_\_\_\_

Boxplots and Outliers

**Show all work on your own paper!**

The 1984 Winter Olympics were held in Sarajevo, Yugoslavia. The table below lists the total number of gold, silver, and bronze medals won, by country.

# Country Total Medals

Austria 1

Canada 4

Czechoslovakia 6

Finland 13

France 3

Germany, East 24

Germany, West 4

Great Britain 1

Italy 2

Japan 1

Liechtenstein 2

Norway 9

Sweden 8

Switzerland 5

USSR 25

United States 8

Yugoslavia 1

1. Find the five-number summary of the data. Show all work!
2. Use the 1.5IQR rule to find the outliers. Show all work!
3. Which countries are outliers? Why do you think these countries are outliers?
4. Construct a box plot of the data. Make a sketch on graph paper.
5. Which measures of the center and spread would be most appropriate to use to describe this data set? Explain.
6. Organize the data into a frequency table. Use interval width of 5.
7. Construct a histogram of the data. Make a sketch on graph paper.
8. Describe the data in context. Why do you think the data is skewed?