## Chapter 6 Review

Lessons 6.6 and 6.7
Name: $\qquad$
Date: $\qquad$ Hour: $\qquad$

## Skills Assessed:

I can make and use a stem-and-leaf plot.
I can find the mean, median and mode of a data set.
I can draw a box-and-whisker plot to organize real-life data.
I can read and interpret a box-and-whisker plot of real-life data.

The table shows the number of nations represented in the Winter Olympic Games from 1948 through 1994.

| Year | 1948 | 1952 | 1956 | 1960 | 1964 | 1968 | 1972 | 1976 | 1980 | 1984 | 1988 | 1992 | 1994 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nations | 28 | 30 | 32 | 30 | 36 | 37 | 35 | 37 | 37 | 49 | 57 | 64 | 67 |

1) List the data above in increasing order in an ordered stem-and-leaf plot.
2) Find the mean, the median, and the mode of the collection of numbers. $\qquad$
median $=$ $\qquad$
mode $=$ $\qquad$
3) What number could you add to the set of data to make it have more than one mode? Explain.
4) Which measure of central tendency best represents the data? Explain.

The data to the right shows the age of actors and actresses who won the Academy Award for best actor and actress for the years 1987-1998.
5) Find the first, second and third quartiles of the data listed as "Actor's Age."
first quartile $\qquad$
second quartile $\qquad$
third quartile $\qquad$

| Year | Actor's Age | Actress's Age |
| :---: | :---: | :---: |
| 1987 | 33 | 41 |
| 1988 | 51 | 25 |
| 1989 | 31 | 80 |
| 1990 | 42 | 42 |
| 1991 | 54 | 29 |
| 1992 | 51 | 33 |
| 1993 | 36 | 35 |
| 1994 | 37 | 45 |
| 1995 | 31 | 49 |
| 1996 | 45 | 39 |
| 1997 | 60 | 34 |
| 1998 | 45 | 25 |

6) Draw a box-and-whisker plot of the age of the actors.

7) Below is a box-and-whisker plot of the age of the actresses. Compare the box-and-whisker plot you created in problem \#6 to the box-and-whisker plot below.

8) Use the box-and-whisker plot below that shows the amount of time (in hours) that students spent studying last week. Is the following statement true. Explain.

More students studied less than 6 hours than studied more than 6 hours.


