

Statistics 2.3 Review

Name:

Measures of Central Tendency

Hour:

Date:

- 1) Twenty-three people were surveyed to find the number of minutes they exercise each week. Find the mean, median, and mode of the data. If any of these measure cannot be found, briefly explain why.

108	139	120	123	120	150	124	111	101	132	123	131
139	119	118	131	157	119	116	117	127	114	127	

- 2) The breeds of several dogs and the number of each registered is given. Find the mean, median, and mode of the data. If any of these measure cannot be found, briefly explain why.

Breed	Labrador Retriever	Yorkshire Terrier	German Shepherd	Golden Retriever	Beagle	Dachshund	Boxer
Number registered (in thousands)	124	48	44	43	39	36	35

- 3) Weekly salaries (in dollars) for a sample of registered nurses are listed.

774 446 1019 795 908 667 444 960

- (a) Find the mean, the median, and the mode of the salaries. Which best describes a typical salary?

- 4) The cost of five homes in a certain area is given.

\$164, 000 \$176,000 \$192,000 \$185,000 \$1,242,000

Which measure of central tendency should be used and why?

- 5) **Grades** A student receives the following grades, with an A worth 4 points, a B worth 3 points, a C worth 2 points, and a D worth 1 point. What is the student's mean grade point score?

B in 2 three-credit classes

D in 1 two-credit class

A in 1 four-credit class

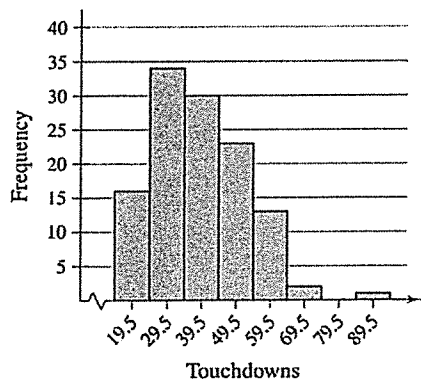
C in 1 three-credit class

- 6) You collect a random sample of the number of children per household in a region. The results are shown at below. Complete the table and find the sample mean of the data set.

Number of children per household, x	Number of households, f	xf
0	10	
1	19	
2	7	
3	7	
4	2	
5	1	
6	4	

Determine whether the approximate shape of the distribution in the histograms are symmetric, uniform, skewed right, or skewed left. Then determine which is greater, the mean or the median, or are the two measures relatively the same.

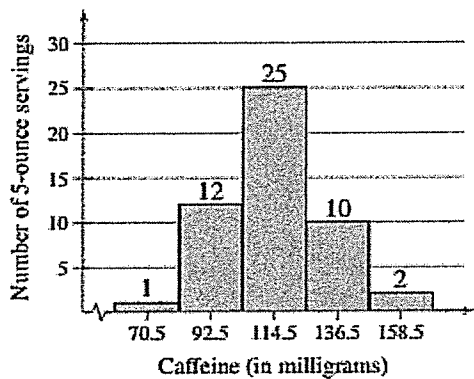
7)



Shape of the distribution:

Compare the mean and the median:

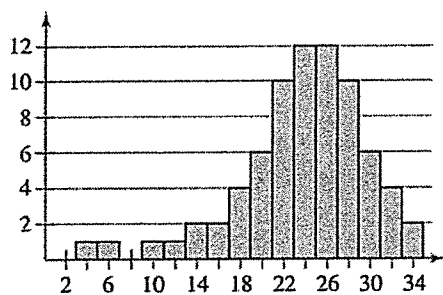
8)



Shape of the distribution:

Compare the mean and the median:

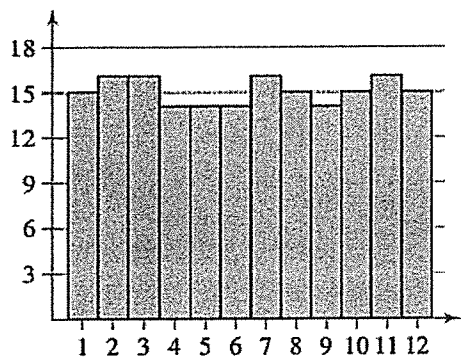
9)



Shape of the distribution:

Compare the mean and the median:

10)



Shape of the distribution:

Compare the mean and the median:

