

Wednesday Riddle: In a family photo you see:

1 grandfather
1 grandmother
2 fathers
2 mothers
6 children
4 grandchildren
2 sisters
2 brothers
3 sons
3 daughters
1 father-in-law
1 mother-in-law
1 daughter-in-law

What is the fewest
number of people
possible that are in
the photo?

****Answer****

8 people!!

4 kids (2 boys, 2 girls)

Their mom and dad

Their grandma and grandpa (The dad's parents)



We Bring Excitement!

**Get ready
for.....**

GRUDGEBALL!!

Rules of the Game

- Get to cross off two X's of the other teams if you get the question correct.
- Also, you get a chance to shoot at the 2-point line (get to cross off an additional X) and the 3-point line (get to cross off an additional 2 X's)
- If you lose all of your X's, if you get a question right AND make a basket, then you get 4 more X's back...BUT you don't also get to cross off 2 of the other teams' X's

Expectations

1. Each team member gets a chance to write the answer on the dry erase board and to come up to shoot the ball into the basket.
2. I am allowed to take away X's if any teams are too loud or not respectful of the other teams.

Categorical, Ordinal, Discrete, or
Continuous?

What year were you born in?

Discrete

Categorical, Ordinal, Discrete, or
Continuous?

Names of students in our class.

Categorical

A survey was given to shoppers at Crabtree Valley Mall asking them their favorite stores in the mall. 11 preferred Macy's, 10 preferred Belk, 5 preferred Oakley, 6 preferred Apple, and 3 preferred American Eagle.

Favorite Stores	Frequency	Relative Frequency
Macy's	11	$11/35 \approx 31.4\%$
Belk	10	$10/35 \approx 28.6\%$
Oakley	5	$5/35 \approx 14.3\%$
Apple	6	$6/35 \approx 17.1\%$
American Eagle	3	$3/35 \approx 8.6\%$

Categorical, Ordinal, Discrete, or Continuous?

Which class are you in? (Freshman, Sophomore, Junior, Senior)

Ordinal

Which measure of central tendency would *best* describe the following scenario?

The price of apartments in the Campus Crossing apartment complex

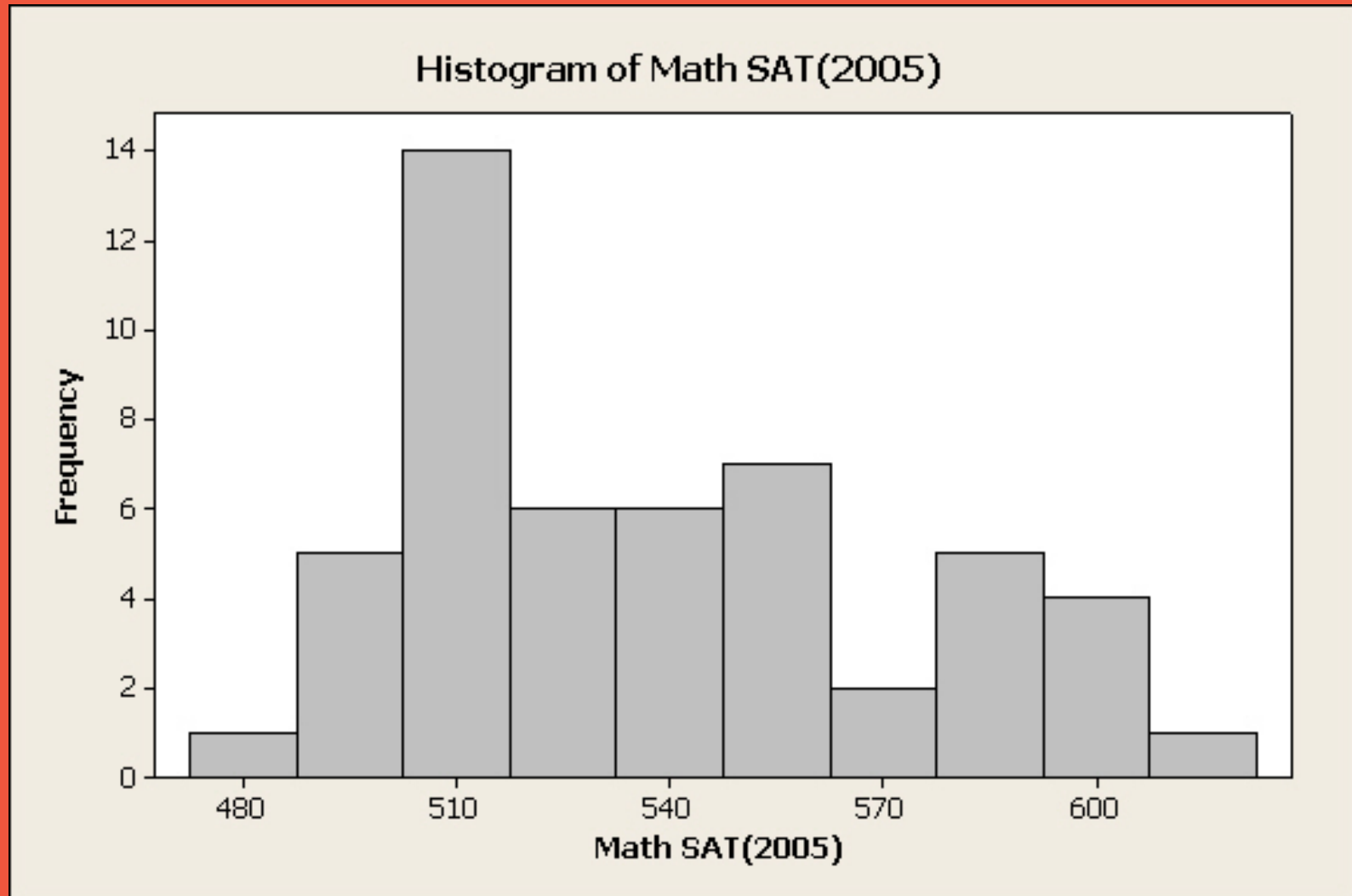
Mean

Which measure of central tendency would *best* describe the following scenario?

The ages of people who go to Crossroads Cinemas on a Saturday

Median

What is the bin width of the histogram?



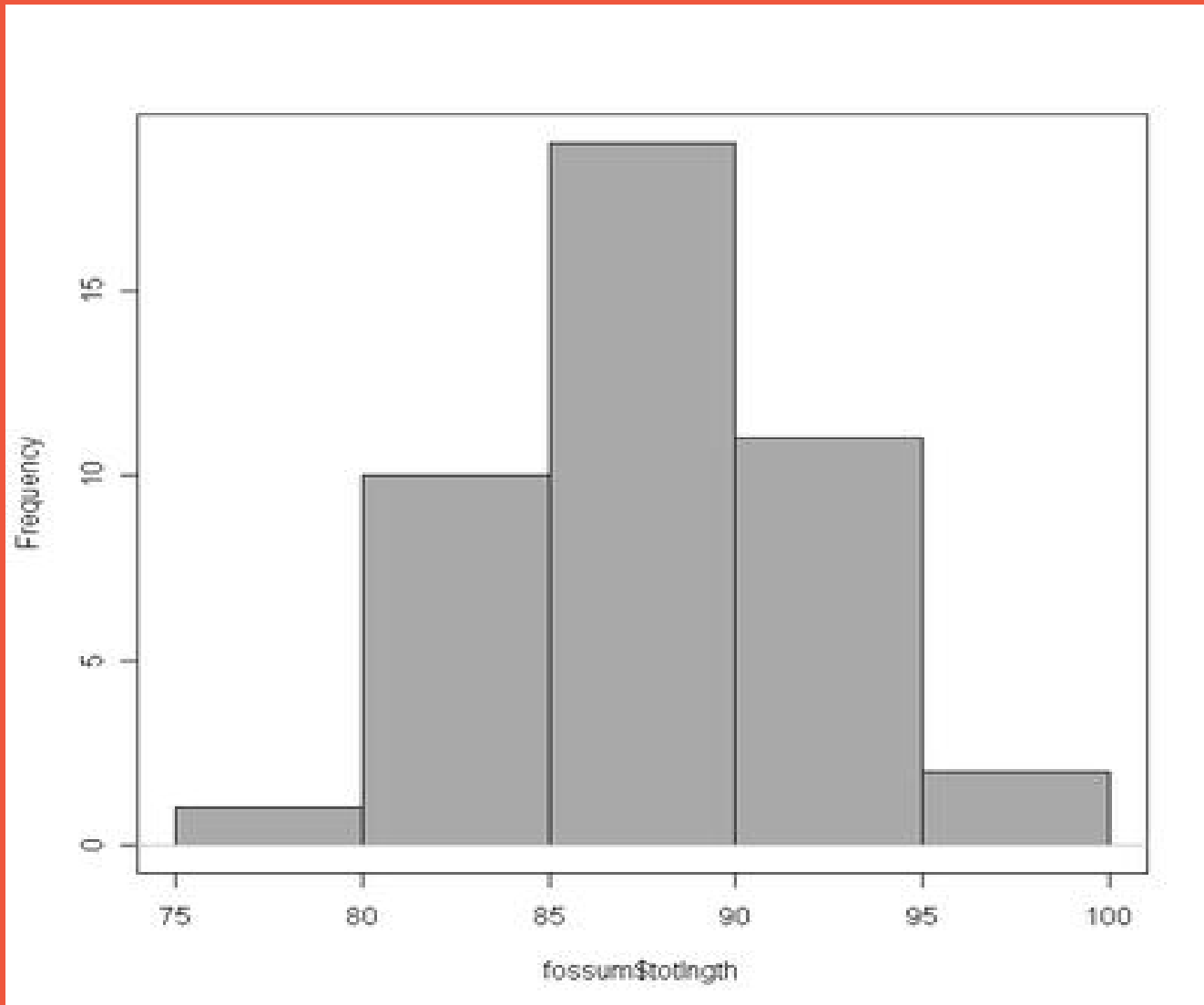
15 units

Categorical, Ordinal, Discrete, or Continuous?

How much flour does it take to bake
a cake?

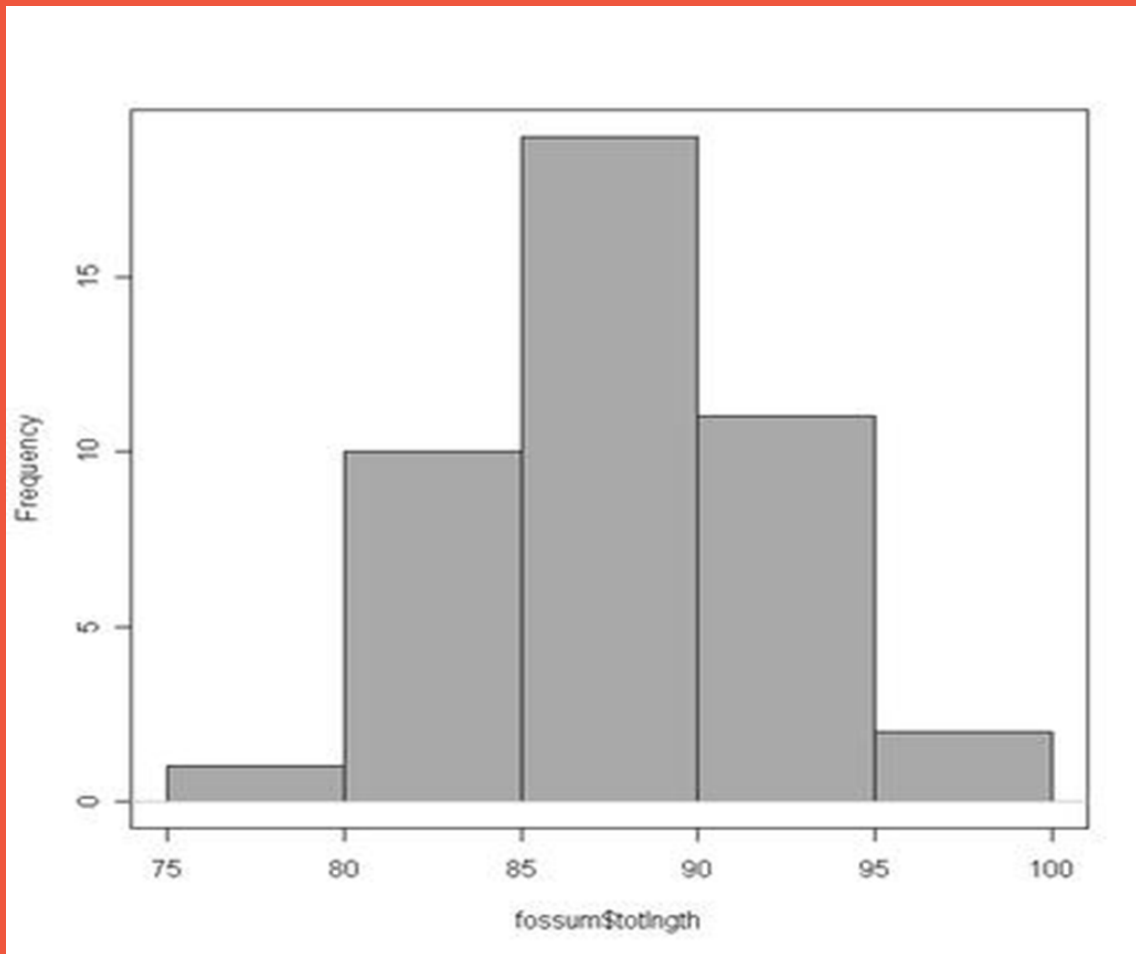
Continuous

What is wrong with the following histogram?



There is no title!

Analyze the histogram.



The histogram is symmetrical.

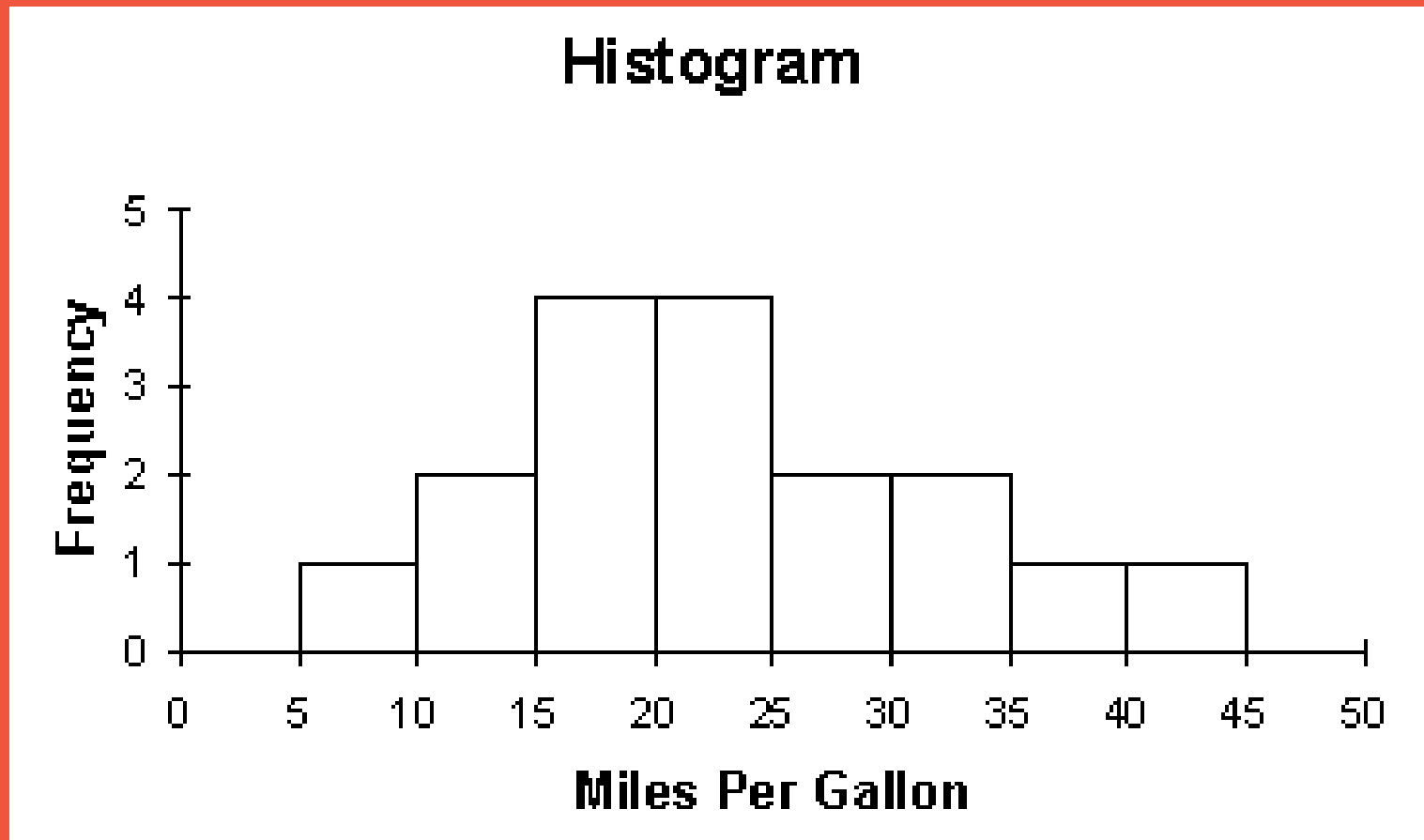
The bowling scores for all bowlers last Friday night are given below. How many bowlers' scores fall in the fourth bin of the histogram?

86	74	100	103	54	48	32	88	160
172	188	255	128	58	133	101	85	75
110	116	99	189	199	201	230	280	66
178	123	215	188	105	44	127	117	105

Friday Night Bowling Scores



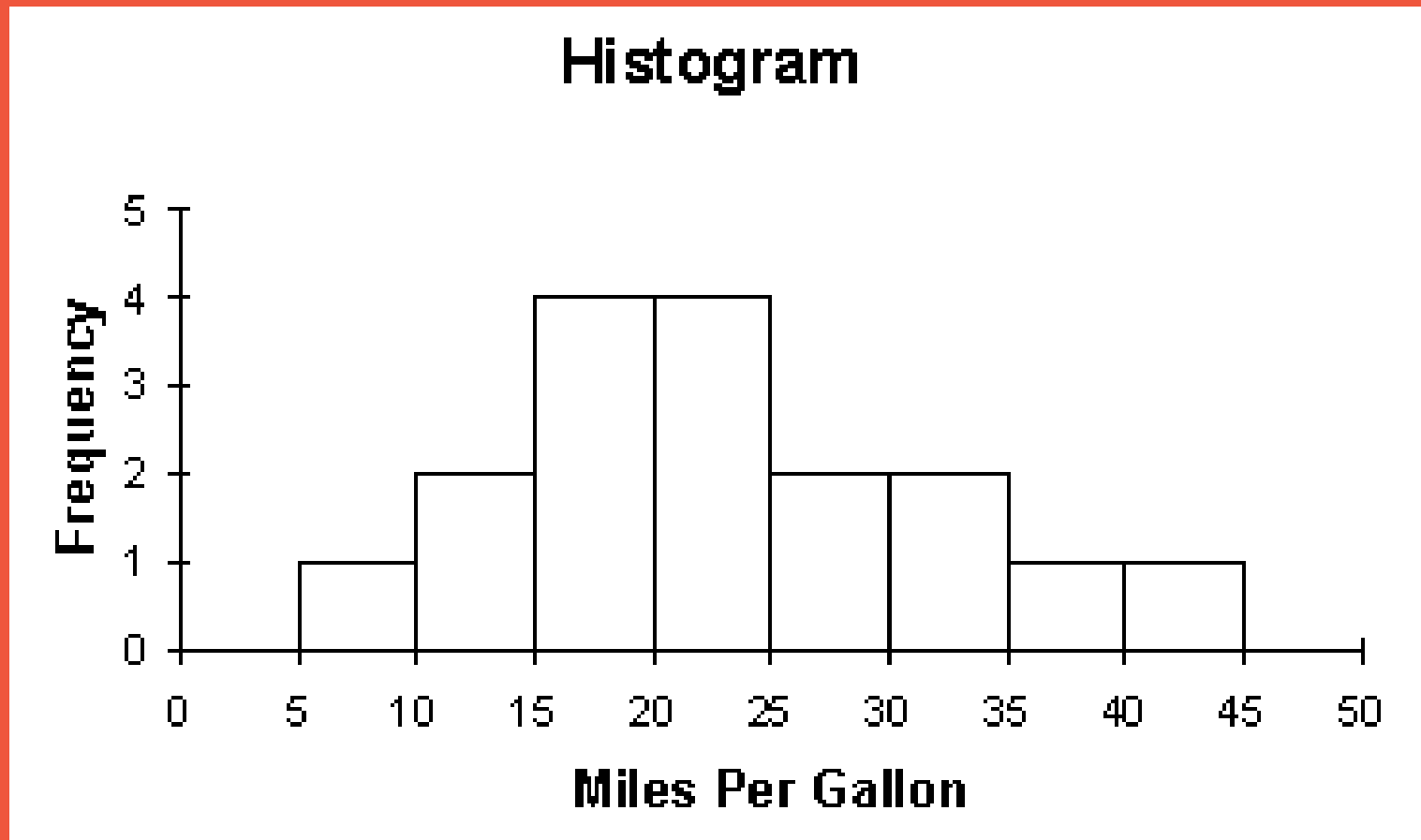
How many values are between 5 and 25?



Categorical, Ordinal, Discrete, or Continuous?

How long does it take you to get to the nearest mall?

How many values are in the data set?



Categorical, Ordinal, Discrete, or
Continuous?

What did Jimmy Johnson place in the
Daytona 500?

Are there any outliers in the data set?
If so, which values are they?

School	Number of Students
Athens Drive High School	1989
Broughton High School	2167
Wakefield High School	2529
Cardinal Gibbons High School	1286
Enloe High School	2673
Wake NCSU STEM Early College	110
Green Hope High School	2219

No outliers!

Analyze the data. (Skewed, symmetrical?)

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Athens Drive High School	1989
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Symmetrical

Determine the mean and standard deviation of the data.

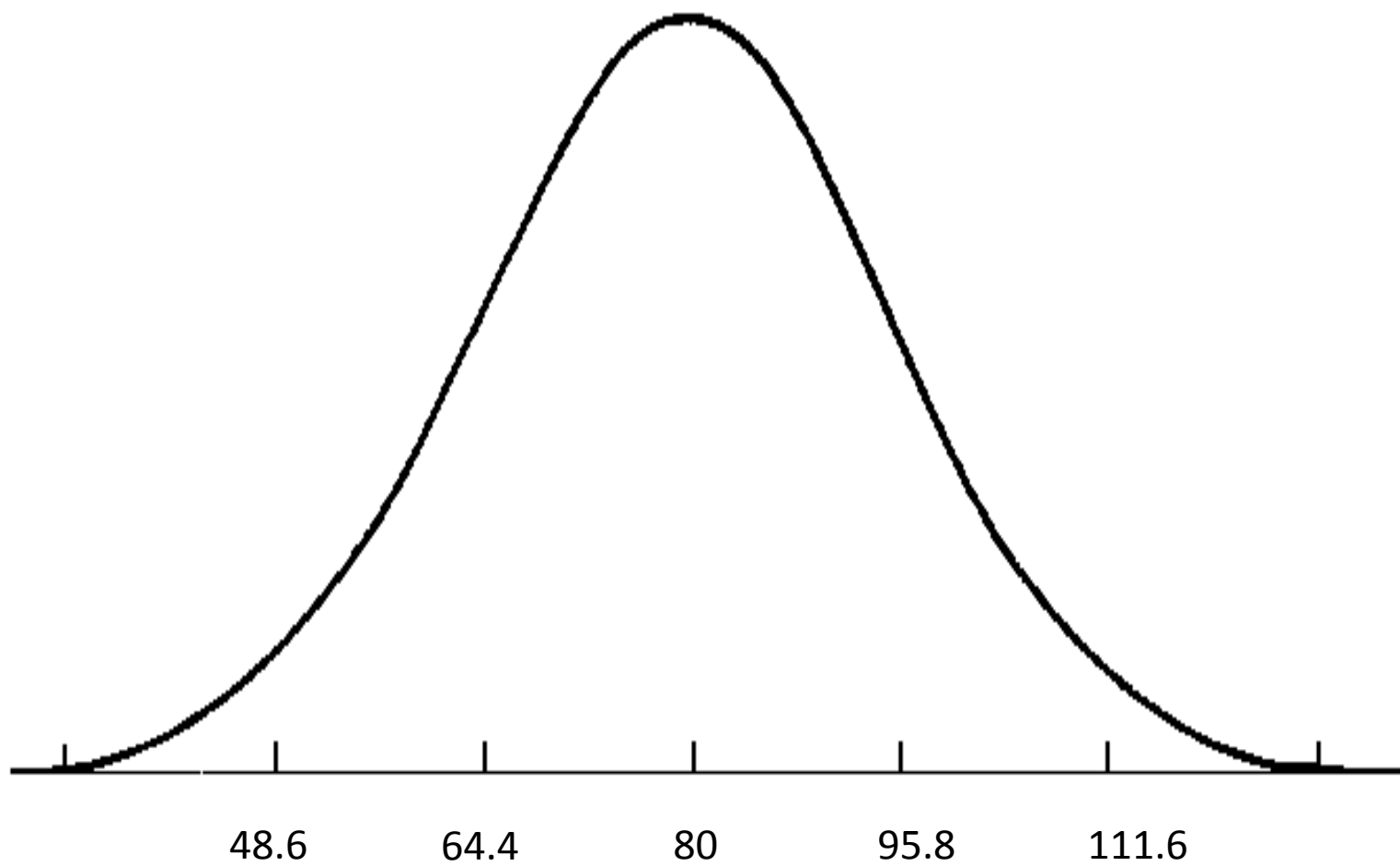
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Mean ≈ 1853.3

Standard Deviation ≈ 888.82

Create a normal curve that shows the distribution of grades on a test in an AFM class.

Name	Grade
Emily	67
Madeline	98
Josh	73
Juan	87
Shakira	89
Demetrius	54
Katelyn	92



What interval does the middle 68% lie in?

Name	Grade
Emily	67
Madeline	98
Josh	73
Juan	87
Shakira	89
Demetrius	54
Katelyn	92

64.4-95.8

Which students are in the top 50%?

Name	Grade
Emily	67
Madeline	98
Josh	73
Juan	87
Shakira	89
Demetrius	54
Katelyn	92

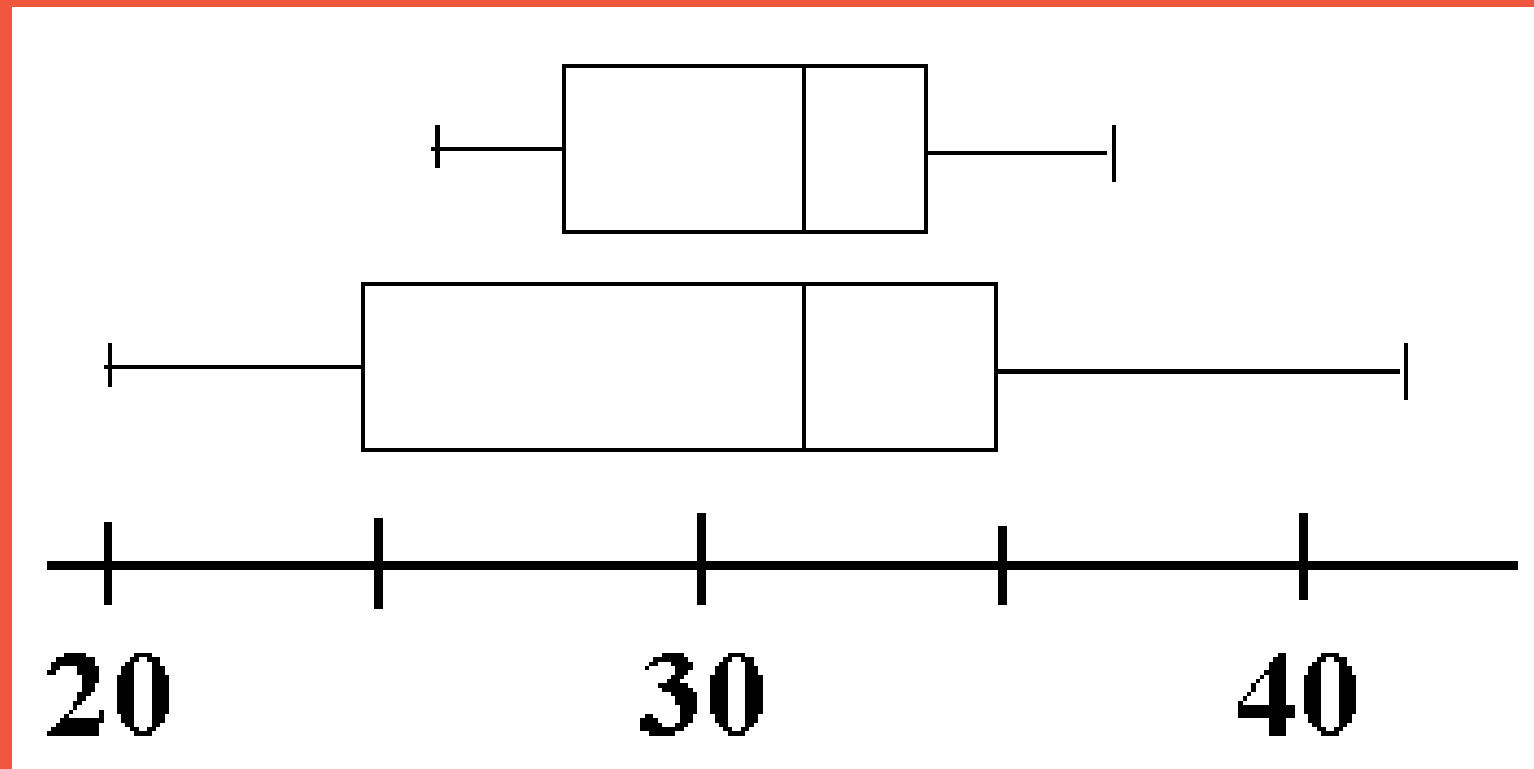
Madeline, Juan, Shakira, Katelyn

Quantitative or Qualitative?

List of hotels near Raleigh, North
Carolina.

Qualitative

The top box plot represents data from Chik-fil-A about the number of times a random sample of people ate at Chik-fil-A last year. The bottom box plot represents this data from the year before. What conclusions can you make about 2012 versus 2013?



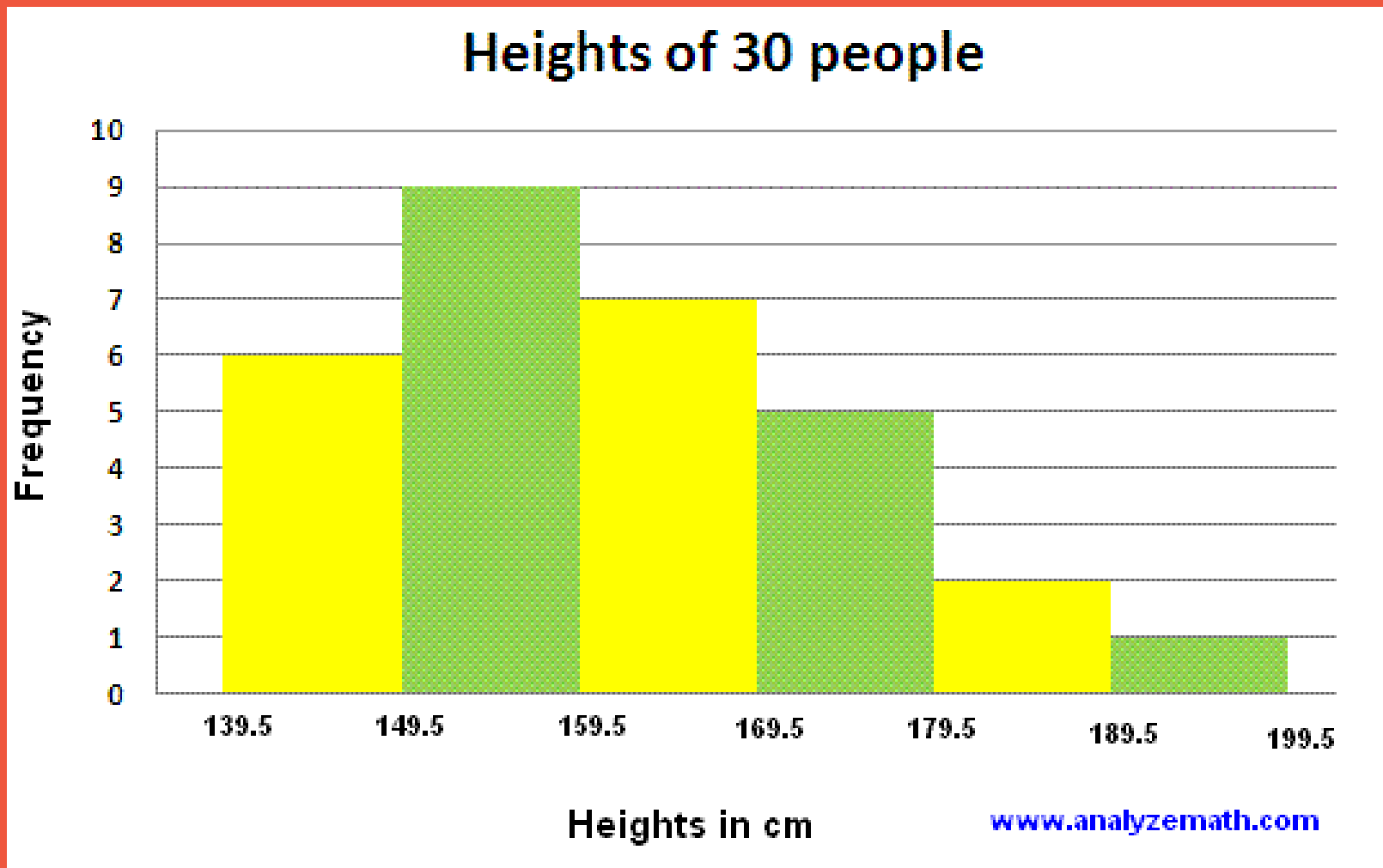
- In 2012, there was more variation in the number of times people ate at Chik-fil-A.
- The medians are similar
- Both box plots are slightly skewed left.

Qualitative or Quantitative?

How many stars are in the sky?

Quantitative

Skewed left, right, or symmetrical?



Skewed right

Categorical, Ordinal, Discrete, or Continuous?

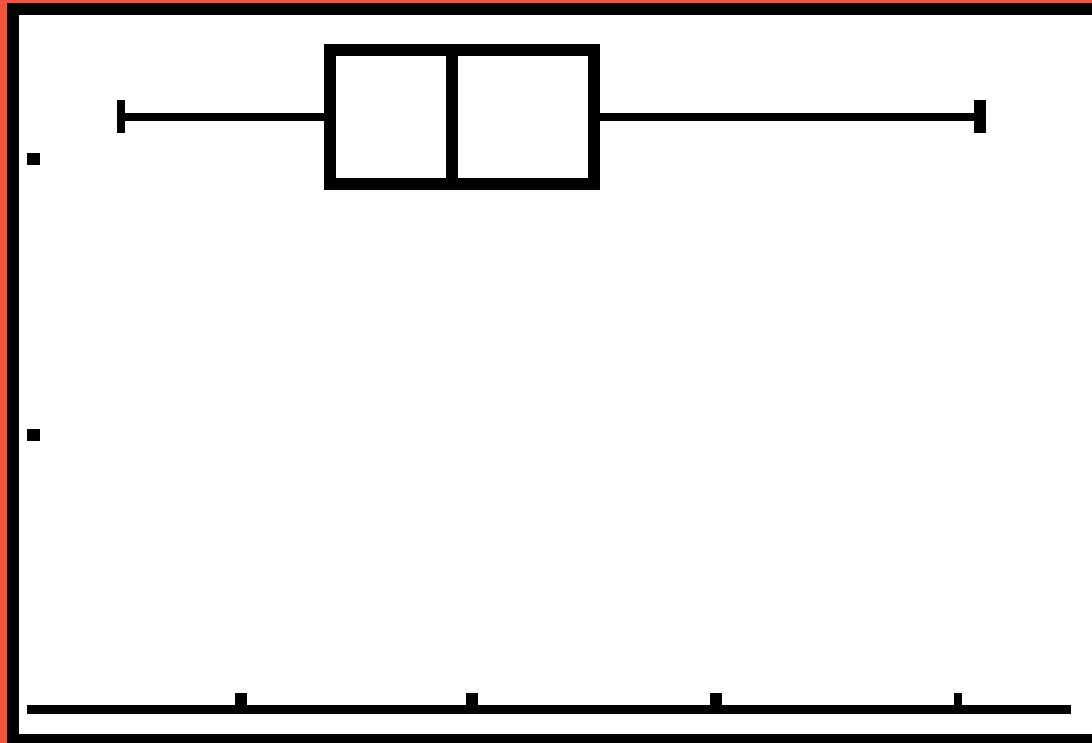
List of your favorite snack foods

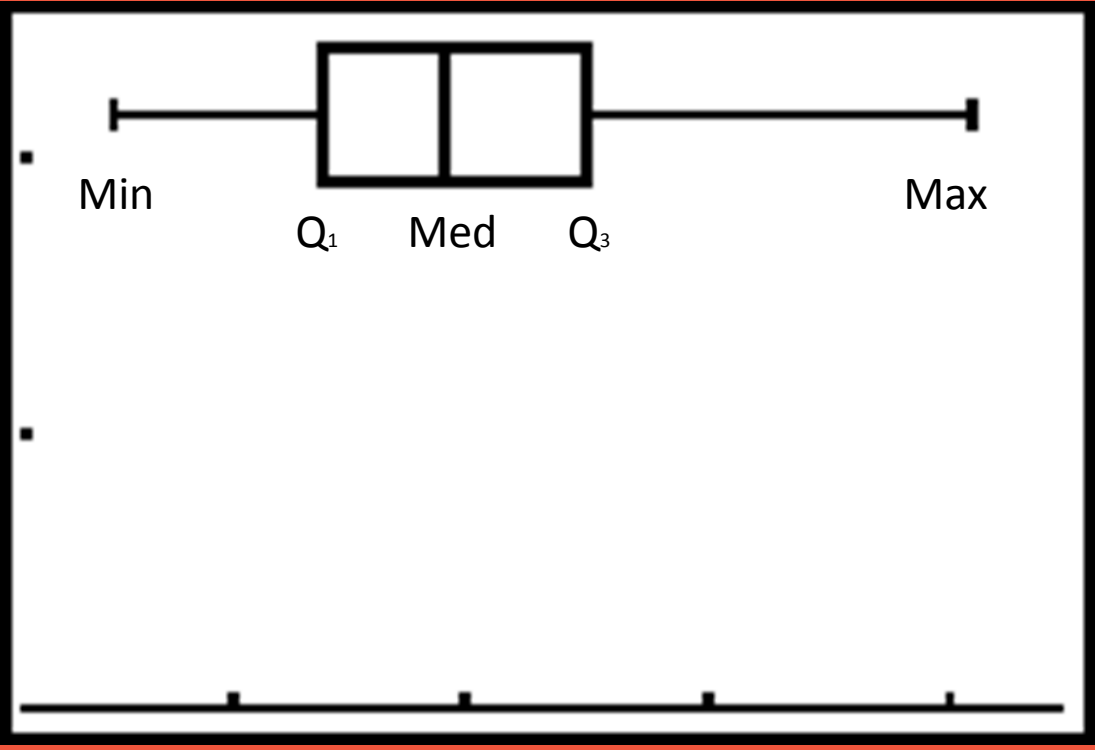
Categorical

List the parts of a histogram that you must include in order to receive full credit on your histogram?

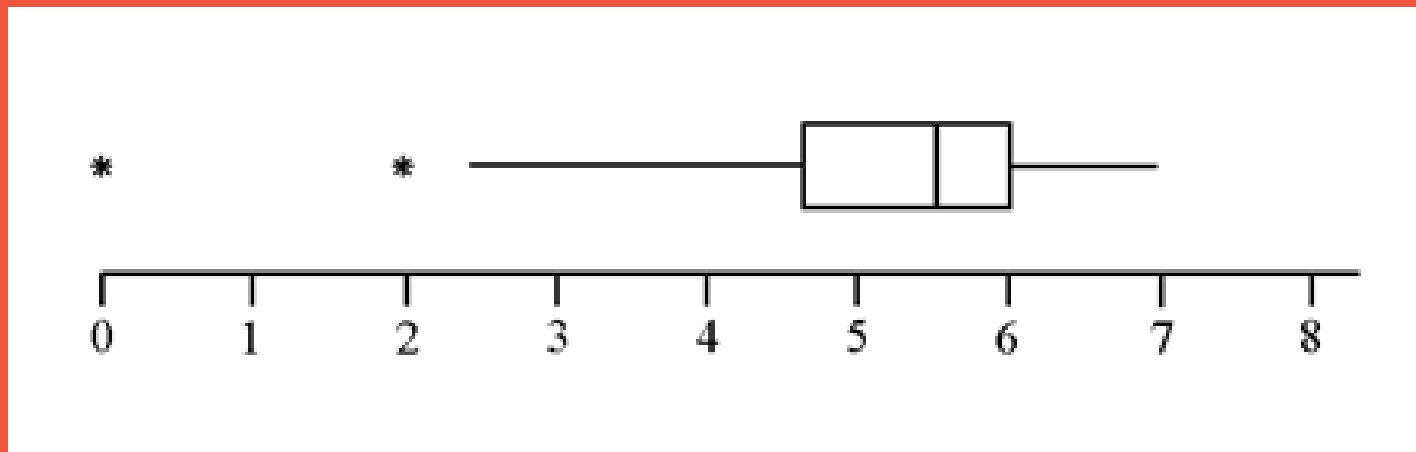
- Title
- Labels for x and y axes
- 5 bins
- Correct bin sizes

Label the parts of the box plot.



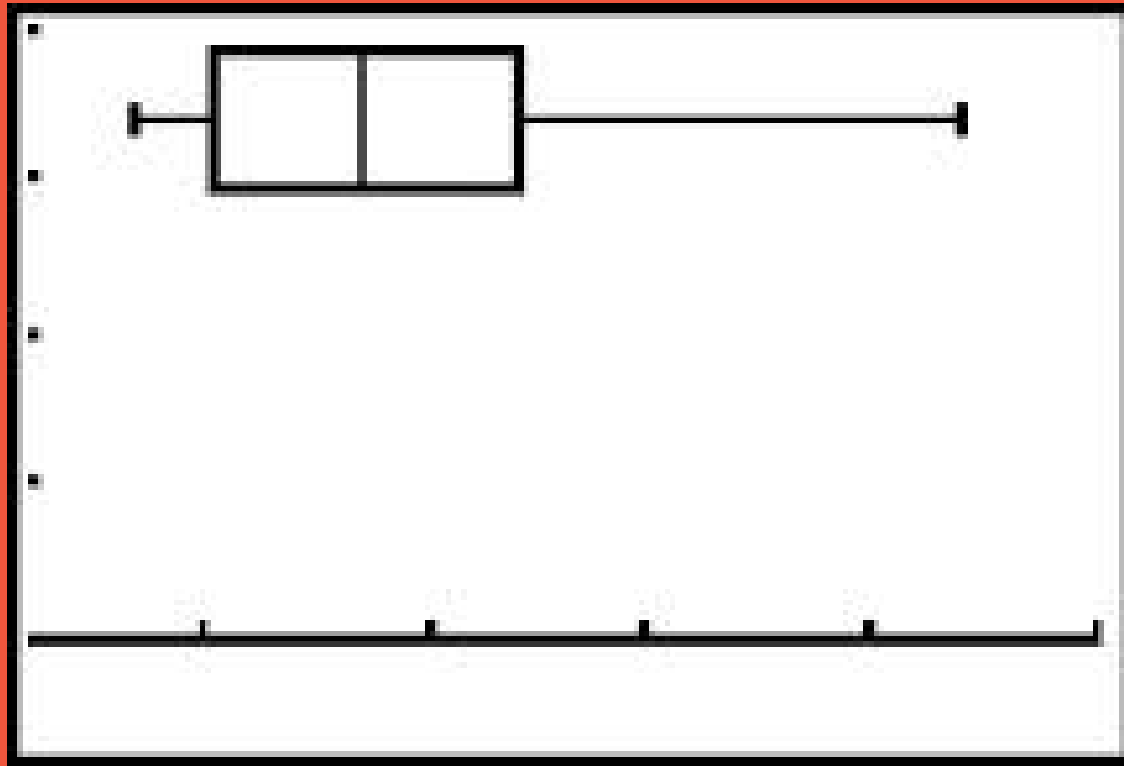


Is the data represented in this box plot skewed? If so, in which direction?



Skewed left

Based on this box plot, which is larger:
The mean or the median?



Mean