Vocabulary Cards and Word Walls
Revised: May 25, 2011

Important Notes for Teachers:

- The vocabulary cards in this file match the Common Core, the math curriculum adopted by the Utah State Board of Education, August 2010.
- The cards are arranged alphabetically.
- Each card has three sections.
    - Section 1 is only the word. This is to be used as a visual aid in spelling and pronunciation. It is also used when students are writing their own "kid-friendly" definition and drawing their own graphic.
    - Section 2 has the word and a graphic. This graphic is available to be used as a model by the teacher.
    - Section 3 has the word, a graphic, and a definition. This is to be used for the Word Wall in the classroom. For more information on using a Word Wall for Daily Review – see "Vocabulary – Word Wall Ideas" on this website.
- These cards are designed to help all students with math content vocabulary, including ELL, Gifted and Talented, Special Education, and Regular Education students.

For possible additions or corrections to the vocabulary cards, please contact the Granite School District Math Department at 385-646-4239.

Bibliography of Definition Sources:

Algebra to Go, Great Source, 2000. ISBN 0-669-46151-8
Math on Call, Great Source, 2004. ISBN-13: 978-0-669-50819-2
Math at Hand, Great Source, 1999. ISBN 0-669-46922
Math to Know, Great Source, 2000. ISBN 0-669-47153-4
Illustrated Dictionary of Math, Usborne Publishing Ltd., 2003. ISBN 0-7945-0662-3
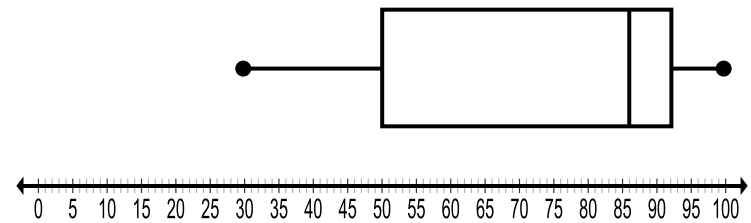Math Dictionary, Eula Ewing Monroe, Boyds Mills Press, 2006. ISBN-13: 978-1-59078-413-6
Student Reference Books, Everyday Mathematics, 2007.
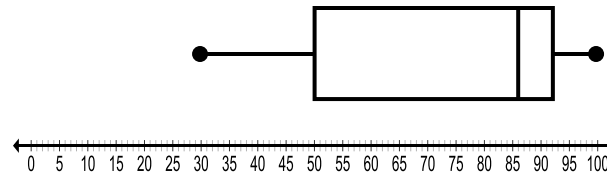Houghton-Mifflin eGlossary, http://www.eduplace.com
Interactive Math Dictionary, http://www.amathsdictionaryforkids.com/

box plot

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box plot

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

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box plot

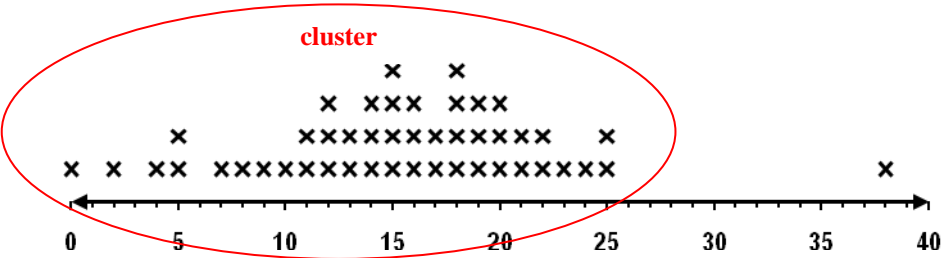0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

A diagram that shows the five number summary of a distribution. (Five number summary includes lowest value, lower quartile, median, upper quartile, and highest value.)
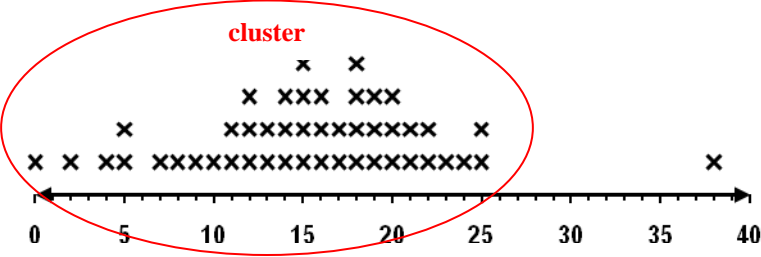
cluster

cluster

Hours Watching TV In One Week

cluster

cluster

Hours Watching TV In One Week

cluster

A group of the same or similar elements gathered or occurring closely together on a graph.
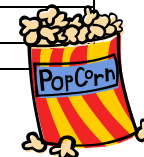
distribution

distribution

Age of People Attending a Movie		
Age Ranges	Tally	Frequency
0 - 9	I I I	3
10 - 19	I I I I	4
20 - 29	I I I I I	6
30 - 39	I I I I I I I	8
40 - 49		0
50 - 59	I	1
60-69	II	2

distribution

Age of People Attending a Movie		
Age Ranges	Tally	Frequency
0 - 9	I I I	3
10 - 19	I I I I	4
20 - 29	I I I I I	6
30 - 39	I I I I I I I	8
40 - 49		0
50 - 59	I	1
60-69	II	2

A table that shows how many there are of each type of data.

dot plot

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dot plot

X
X
X
X
X
X X
X X
X X X X
X X X X
X X X X X

1 2 3 4 5

Number of Pets

---

dot plot

X
X
X
X
X
X X
X X
X X X X
X X X X
X X X X X

1 2 3 4 5
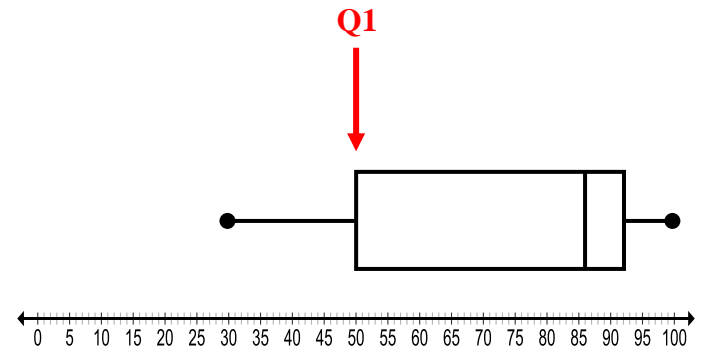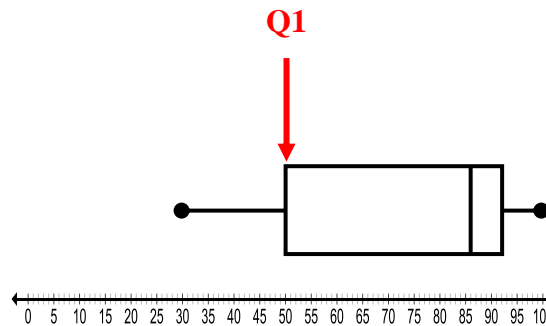
Number of Pets
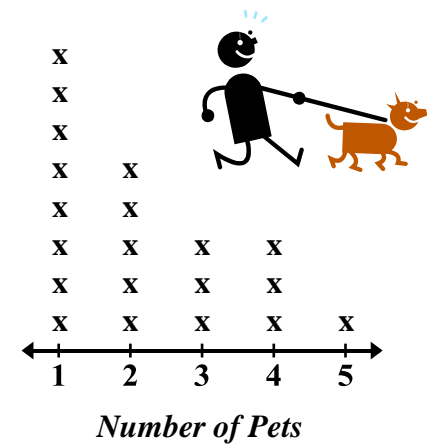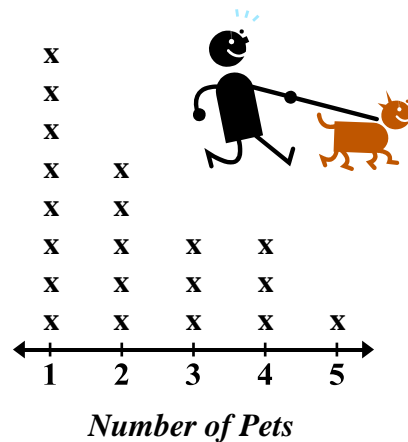
Also known as a line plot. A diagram showing frequency of data on a number line.
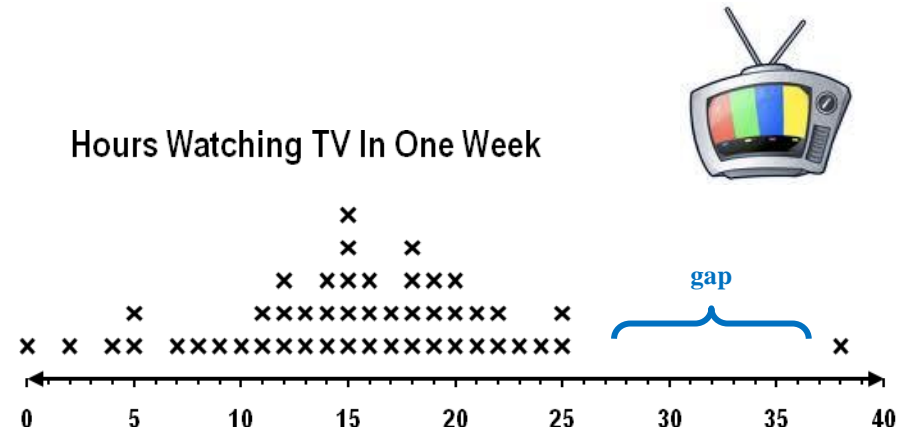
first quartile

first quartile

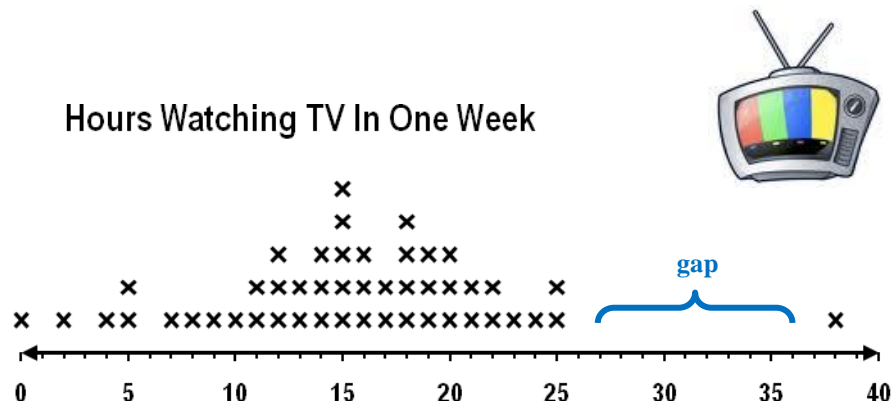Q1

first quartile

Q1

The first quartile is the middle (the median) of the lower half of the data on a box plot. One-fourth of the data lies below the first quartile and three-fourths lies above. Also known as Q1.
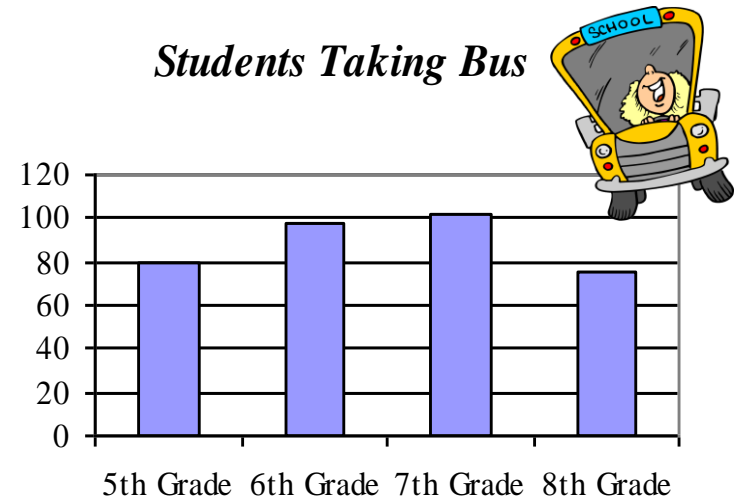
gap

gap

Hours Watching TV In One Week

gap

Hours Watching TV In One Week

A place on a graph where no data values are present.

graph

graph

Students Taking Bus

120
100
80
60
40
20
0

5th Grade   6th Grade   7th Grade   8th Grade

graph

Students Taking Bus

120
100
80
60
40
20
0

5th Grade   6th Grade   7th Grade   8th Grade
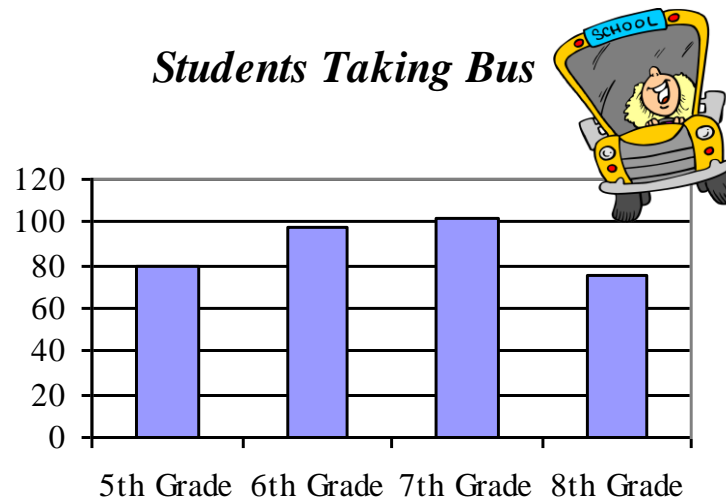
A pictorial device used to show a numerical relationship.

histogram
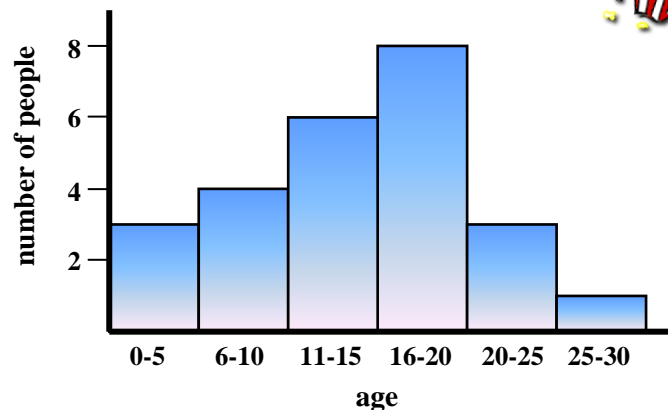
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histogram

Ages of People Attending a Movie

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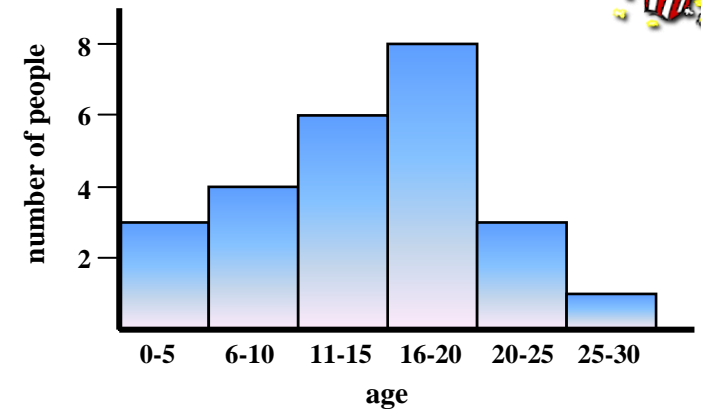
histogram

Ages of People Attending a Movie

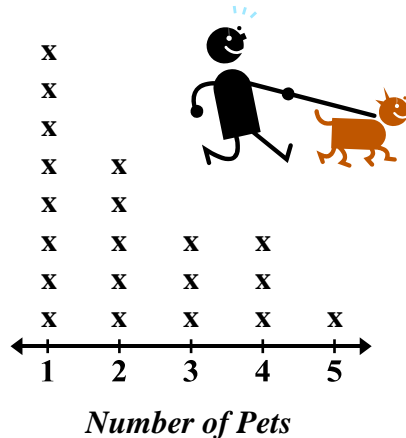A bar graph in which the labels for the bars are numerical intervals.
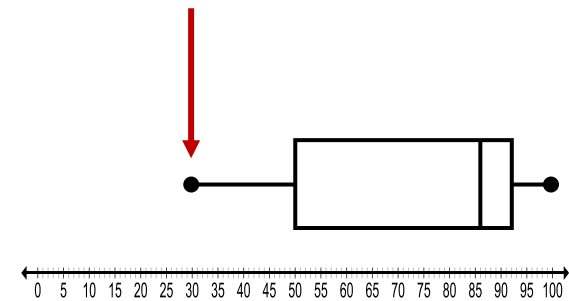
line plot

line plot

```
x
x
x
x
x        x
x        x
x        x    x        x
x        x    x        x
x        x    x        x    x
←———————————————————————————→
1        2    3        4    5
```
Number of Pets

line plot

```
x
x
x
x        x
x        x
x        x    x    x
x        x    x    x
x        x    x    x    x
←———————————————————————————→
1        2    3    4    5
```
Number of Pets
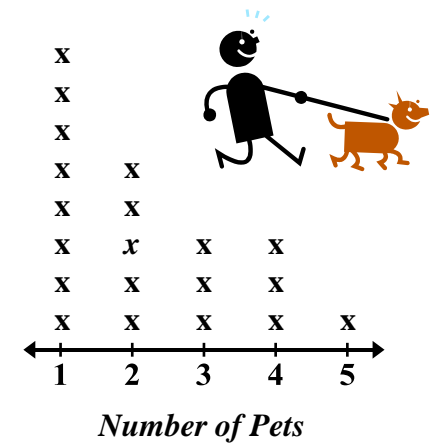
Also known as a dot plot.
A diagram showing
frequency of data on a
number line.

lower extreme

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lower extreme

lower extreme

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

---

lower extreme

lower extreme

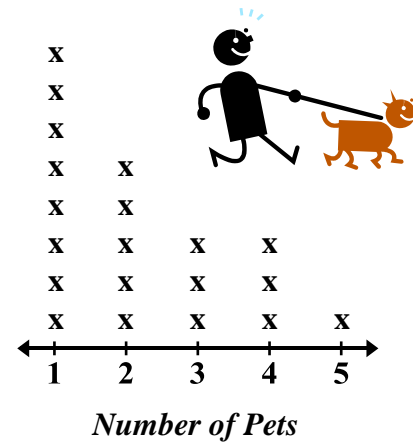0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
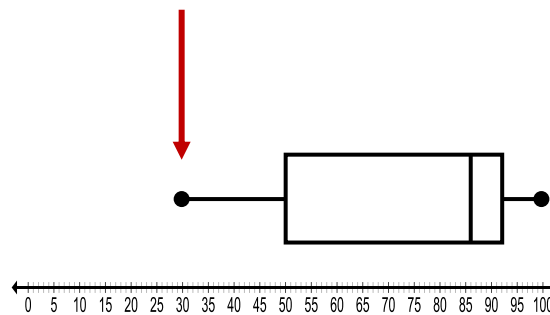
The smallest or least number out of a data set, usually farther away from interquartile range than other data in set.
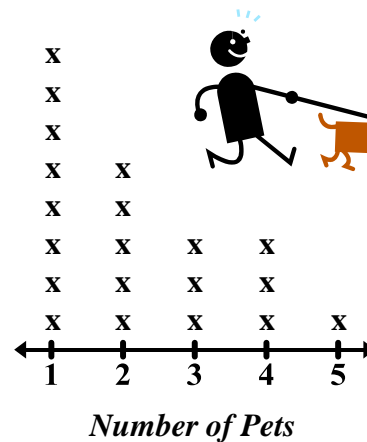(Also known as minimum.)

maximum

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maximum

The maximum is 5.

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maximum

The maximum is 5.

The largest amount; the greatest number in a data set.

mean

mean

Step 1:

$14 + 21 + 27 + 33 + 45 + 46 + 52 = 238$

Step 2:

$$238 \div 7 = \boxed{34} \longleftarrow \quad \text{mean}$$

---

mean

Data Set: 14, 21, 27, 33, 45, 46, 52

Step 1:

$14 + 21 + 27 + 33 + 45 + 46 + 52 = 238$

Step 2:

$$238 \div 7 = \boxed{34} \longleftarrow \text{mean}$$

The sum of a set of numbers divided by the number of elements in the set. (A type of average)

mean absolute deviation

mean absolute deviation

Step 1: Find the mean. (56+78+88)/3 = 74

Step 2: Determine the deviation of each variable from the mean.
56 – 74 = -18
78-74=4
90-74=16

Step 3: Make the deviation 'absolute" by squaring and determining the roots. (eliminate the negative)

(18 + 4 + 16)/3 = 12.67 is the mean absolute deviation.

mean absolute deviation

The weights of the three
people are 56 Kgs, 78 Kgs, and 88 Kgs.

Step 1: Find the mean.
(56+78+88)/3 = 74

Step 2: Determine the deviation of each variable from the mean.
56 – 74 = -18
78-74=4
90-74=16

Step 3: Make the deviation 'absolute" by squaring and determining the roots. (eliminate the negative)

(18 + 4 + 16)/3 = 12.67 is the mean absolute deviation.

In statistics, the absolute deviation of an element of a data set is the absolute difference between that element and a given point.
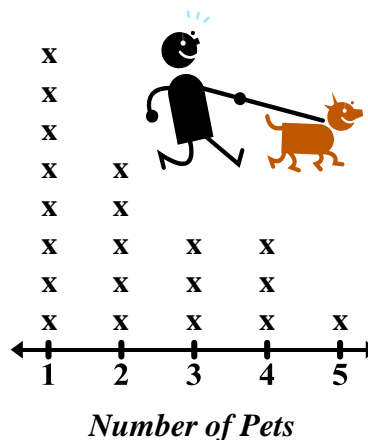
measure of center

measure of center

Number of Pets
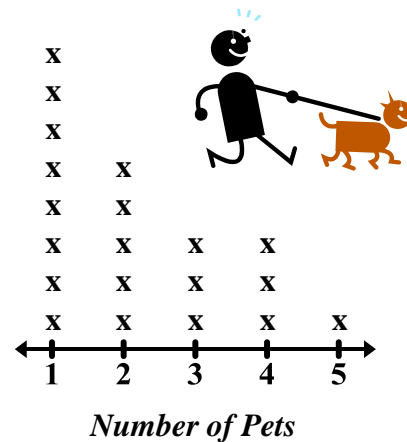
Examples:

Mode = 1

Median = 2

Mean = 2.3

measure of center

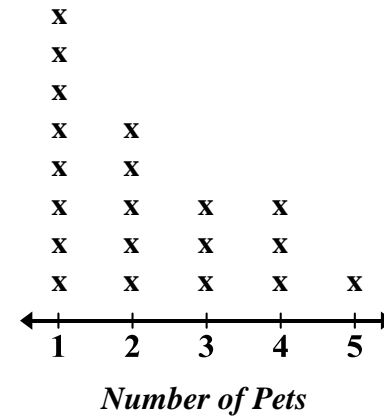
Number of Pets

Examples:

Mode = 1

Median = 2

Mean = 2.3

An average; a single value that is used to represent a collection of data. Three commonly used types of averages are mode, median, and mean. (Also called measures of central tendency or measures of average.)
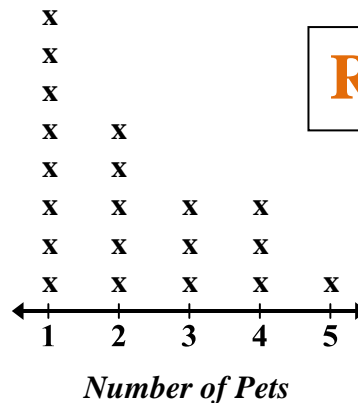
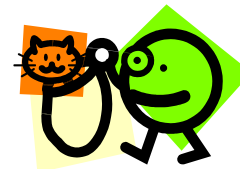# measure of variation

measure of variation

```
x
x
x
x  x
x  x
x  x  x  x
x  x  x  x
x  x  x  x  x
1  2  3  4  5
```
Number of Pets

Range = 4

measure of variation

```
x
x
x
x  x
x  x
x  x  x  x
x  x  x  x
x  x  x  x  x
1  2  3  4  5
```
Number of Pets

Range = 4

A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (Also known as spread or dispersion.)

median

14, 21, 27, **33**, 45, 46, 52

↑

median

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median
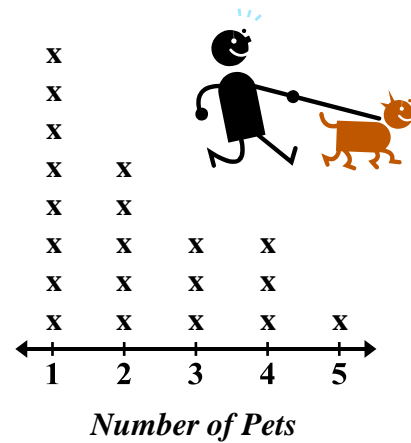
14, 21, 27, **33**, 45, 46, 52

↑

median

The middle number of a set of numbers when the numbers are arranged from least to greatest, or the mean of two middle numbers when the set has two middle numbers.
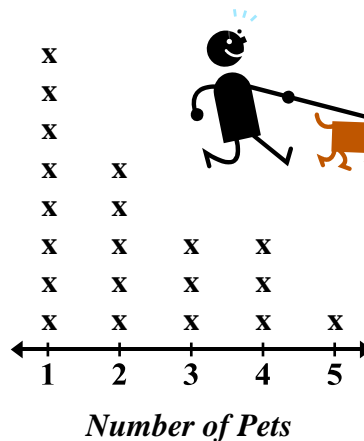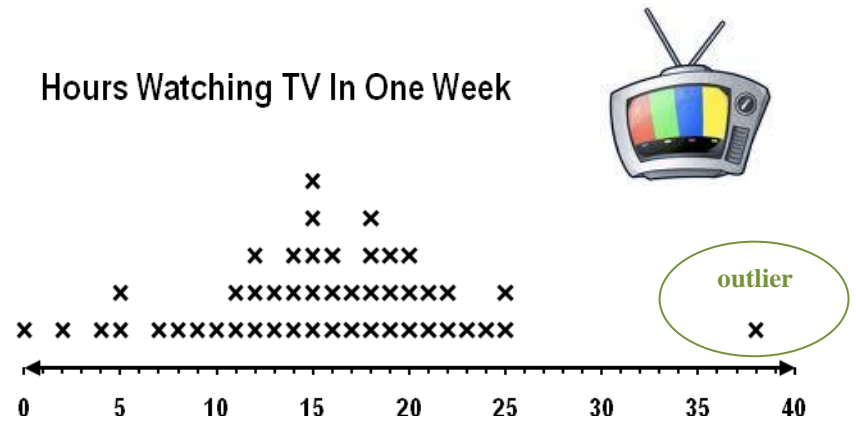
minimum

---

minimum

1 2 3 4 5

Number of Pets

The minimum is 1.

---

minimum

1 2 3 4 5

Number of Pets

The minimum is 1.

The smallest amount; the smallest number in a data set.

outlier

outlier

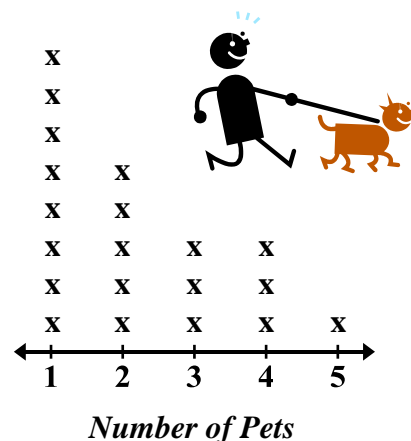Hours Watching TV In One Week

outlier

Hours Watching TV In One Week
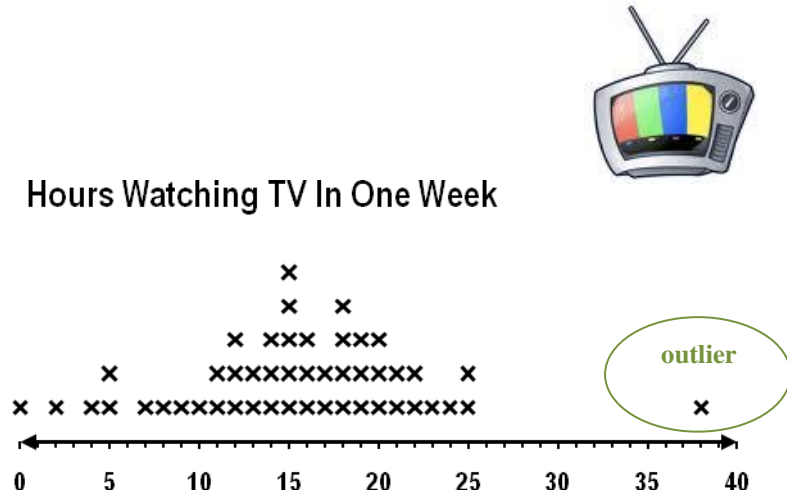
A number in a set of data that is much larger or smaller than most of the other numbers in the set.

range

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range

x
x
x
x x
x x
x x x x
x x x x
x x x x x
1 2 3 4 5

Number of Pets

$5 - 1 = 4$

Range is 4.

---

range

x
x
x
x x
x x
x x x x
x x x x
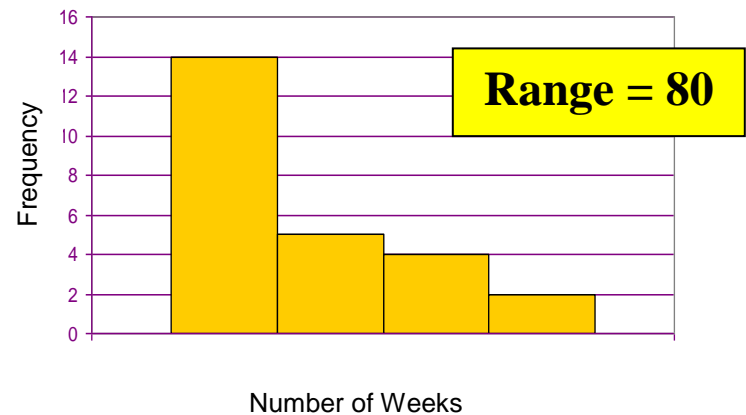x x x x x
1 2 3 4 5

Number of Pets
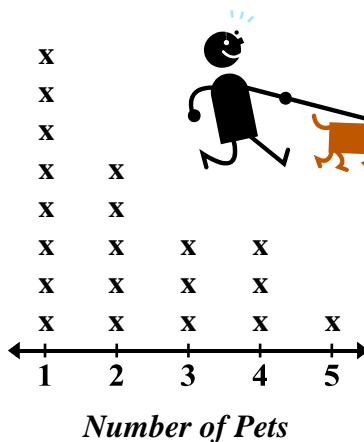
$5 - 1 = 4$

Range is 4.

The difference between the greatest number and the least number in a set of numbers.

spread

spread

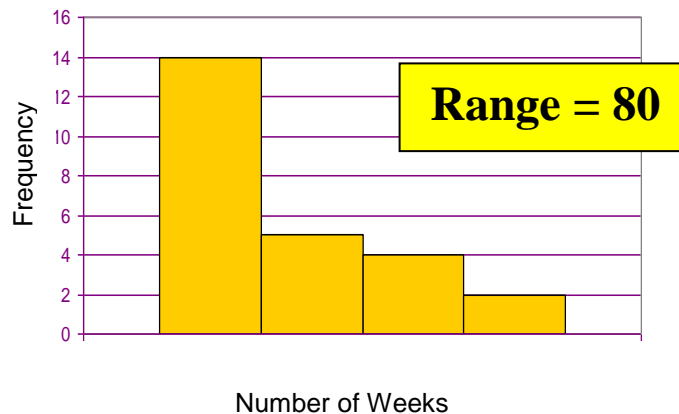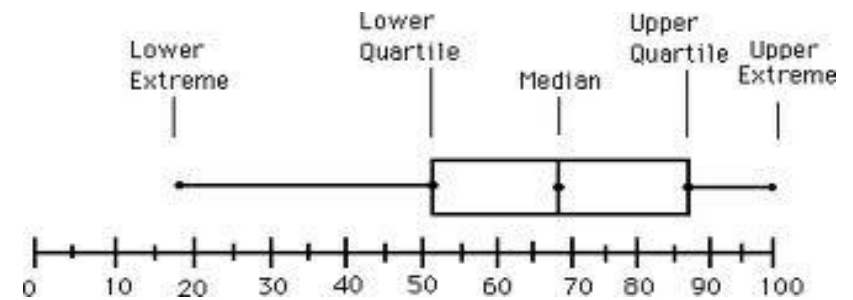**Number of Weeks on the Top 200 Chart**

Range = 80

Number of Weeks

spread

Number of Weeks on the Top 200 Chart
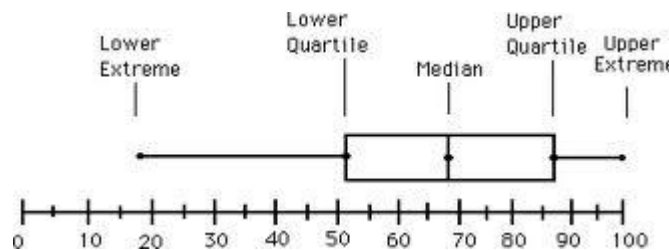

Range = 80

Number of Weeks

A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (Also known as measures of variation or dispersion.)

statistical variability

statistical variability
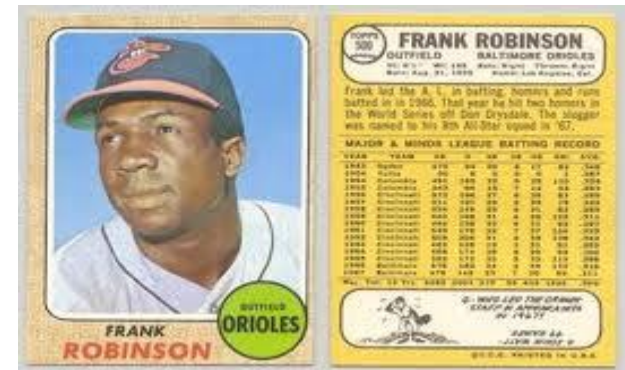

statistical variability

A variability or spread in a variable or a probability distribution. Common examples of measures of statistical dispersion are the variance, standard deviation, and interquartile range.

statistics

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statistics

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statistics

The science of collecting, organizing, representing, and interpreting data.

table

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table

Student	Number of Books Read in the Summer
Sara	3
Jose	8
Timothy	2
Belinda	3
Gretchen	11
Trevor	7

---

table

Student	Number of Books Read in the Summer
Sara	3
Jose	8
Timothy	2
Belinda	3
Gretchen	11
Trevor	7

An organized way to list data. Tables usually have rows and columns of data.

third quartile

third quartile

Q3

| | | | | | | | | | | | | | | | | | | | |
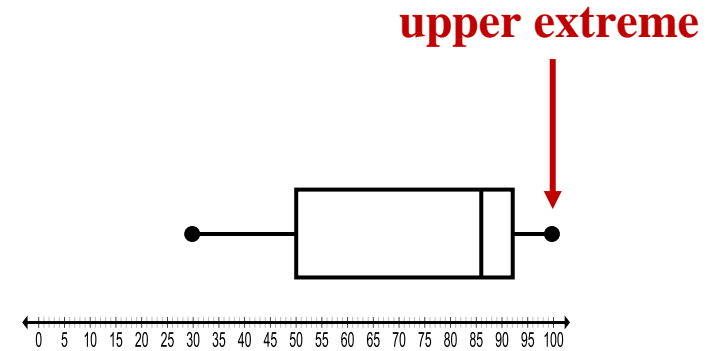0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
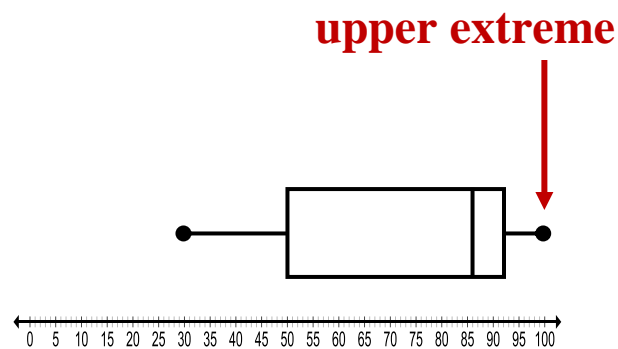
third quartile

Q3
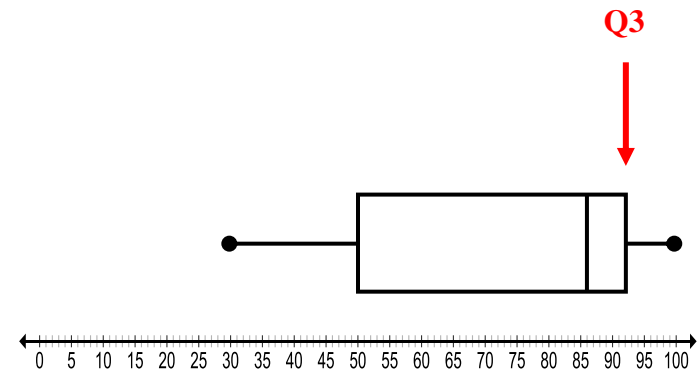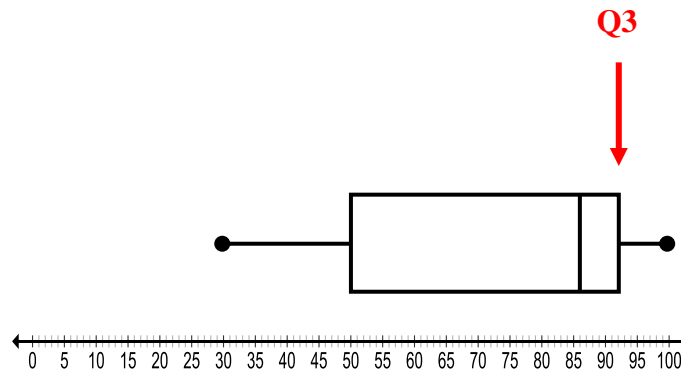
The third quartile is the middle (the median) of the upper half of the data on a box plot. One-fourth of the data lies above the third quartile and three-fourths lies below. Also known as Q3.

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

upper extreme

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upper extreme

upper extreme

---

upper extreme

upper extreme

The greatest or largest number out of a data set, usually farther away from interquartile range than other data in set. (Also known as maximum.)