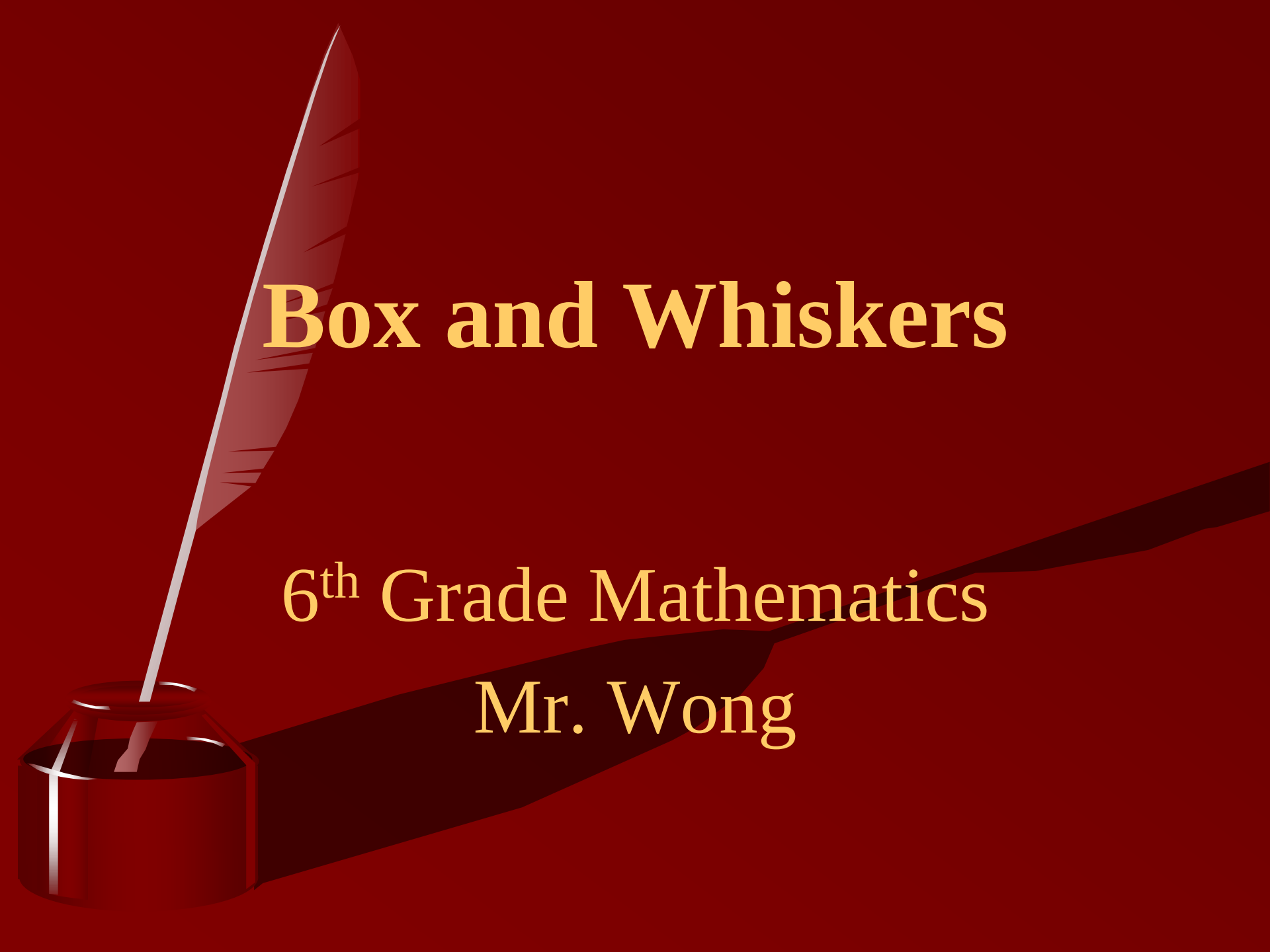


Box and Whiskers

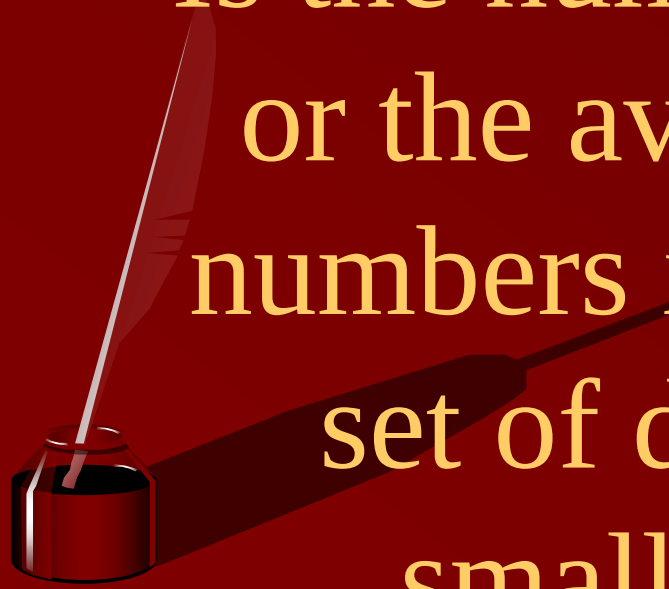
6th Grade Mathematics

Mr. Wong

Box and Whiskers

Median (Q_2)

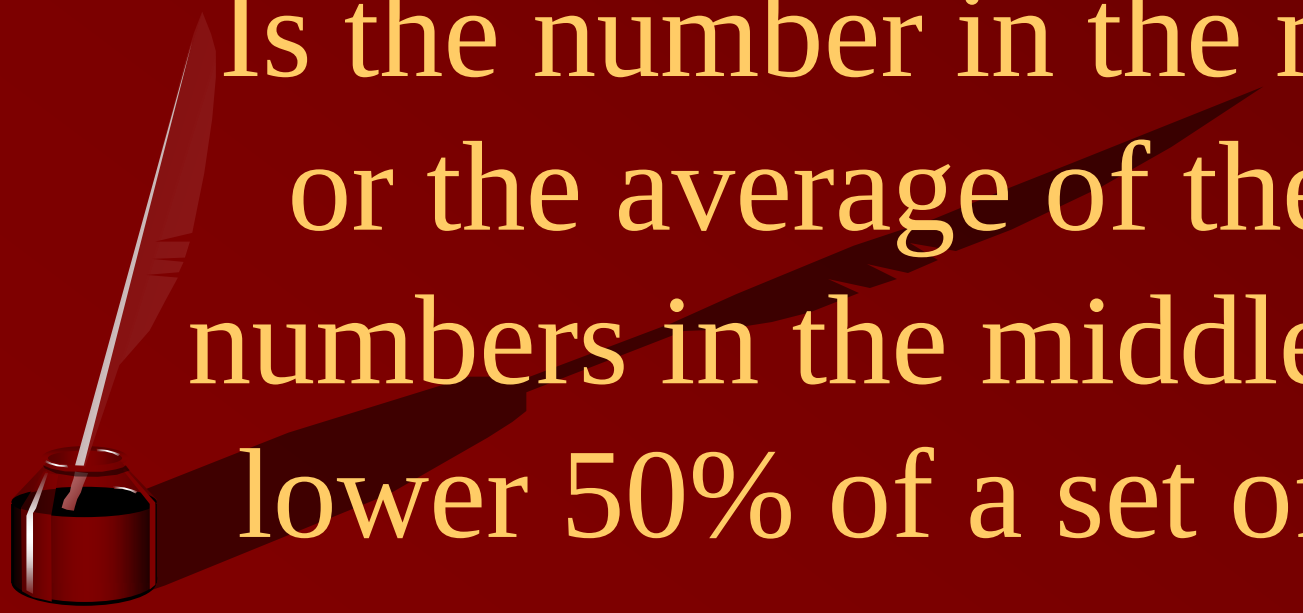
Is the number in the middle or the average of the two numbers in the middle of a set of data listed from smallest to largest.



Box and Whiskers

Lower Quartile (Q_1)

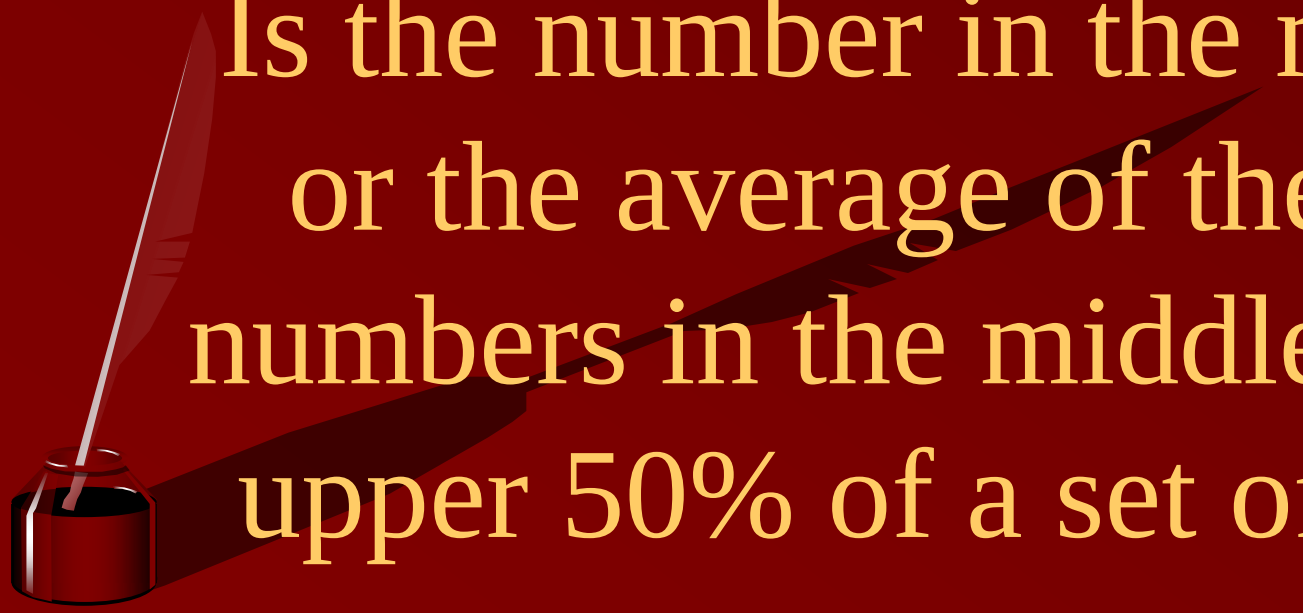
Is the number in the middle or the average of the two numbers in the middle of the lower 50% of a set of data.



Box and Whiskers

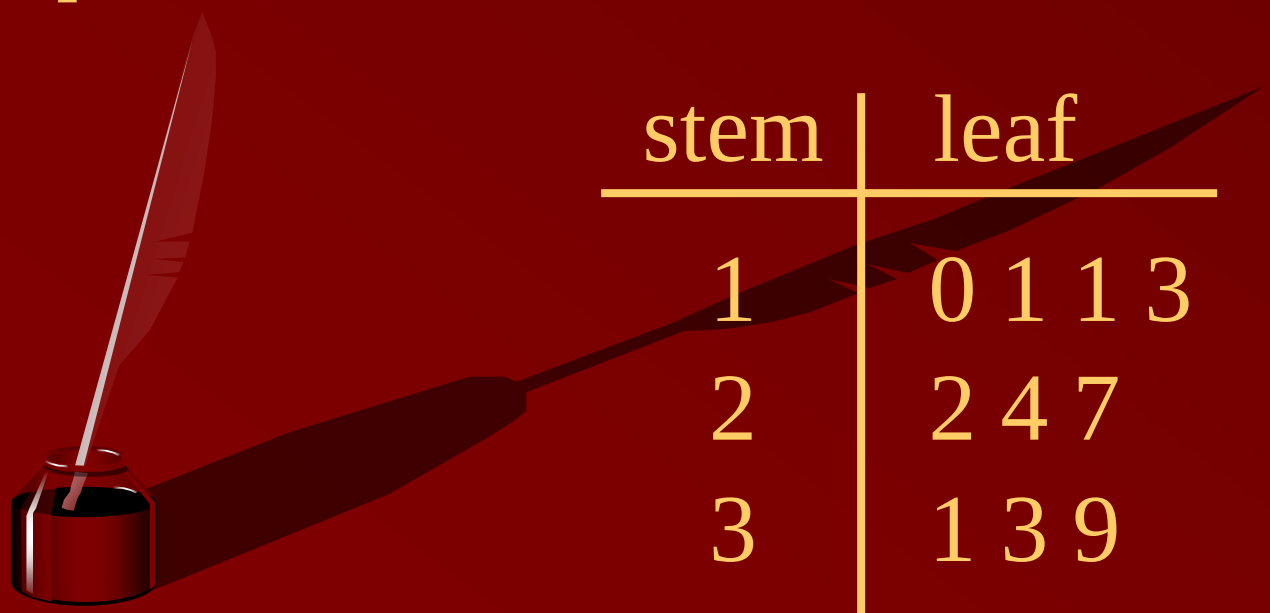
Upper Quartile (Q_3)

Is the number in the middle or the average of the two numbers in the middle of the upper 50% of a set of data.



Box and Whiskers

Given the set of data from the stem and leaf table, find the median, lower quartile, upper quartile, and draw a box and whiskers graph.



stem	leaf
1	0 1 1 3
2	2 4 7
3	1 3 9

Box and Whiskers

stem	leaf
1	0 1 1 3
2	2 4 7
3	1 3 9

First put the numbers in the order from smallest to the largest.

10,11,11,13,22,24,27,31,33,39

To find the median, find the number in the middle.

Two numbers are in the middle, so we must find the average of 22 and 24.

22 + 24 = 46 then 46/2 = 23

The median (Q_2) is 23.

Box and Whiskers

stem	leaf
1	0 1 1 3
2	2 4 7
3	1 3 9

lower 50%

10,11,11,13,22 | 24,27,31,33,39

Q_1

To find the lower quartile, find the number in the middle of the lower 50% set of the data.

The lower quartile (Q_1) is 11.

Box and Whiskers

stem	leaf
1	0 1 1 3
2	2 4 7
3	1 3 9

upper 50%

10,11,11,13,22,24,27,31,33,39

Q_3

To find the upper quartile, find the number in the middle of the upper 50% set of the data.

The upper quartile (Q_3) is 31.

Box and Whiskers

stem	leaf
1	0 1 1 3
2	2 4 7
3	1 3 9

lower 50% | upper 50%

10,11,11,13,22,24,27,31,33,39

Q_1 Q_2 Q_3

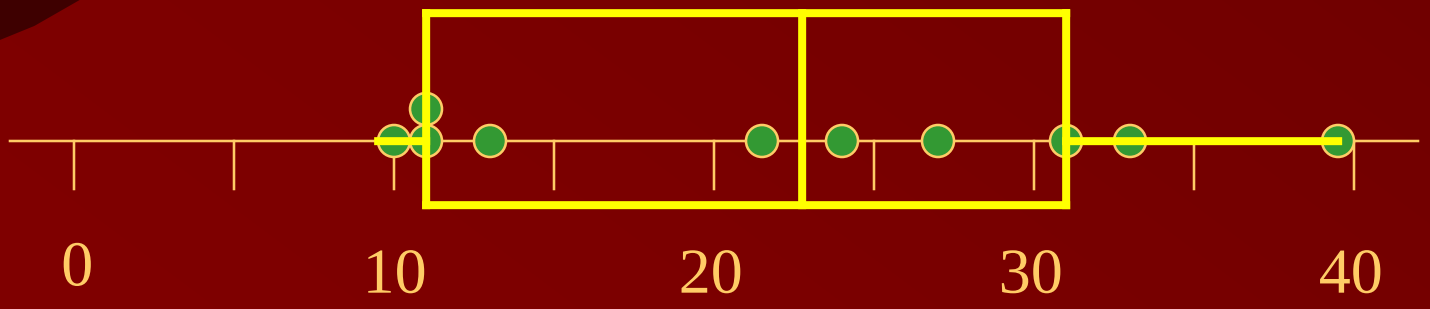
To make a box and whiskers graph.

Create a number line starting with zero.

Plot all the points.

Put vertical lines at each Q_1 , Q_2 , Q_3.

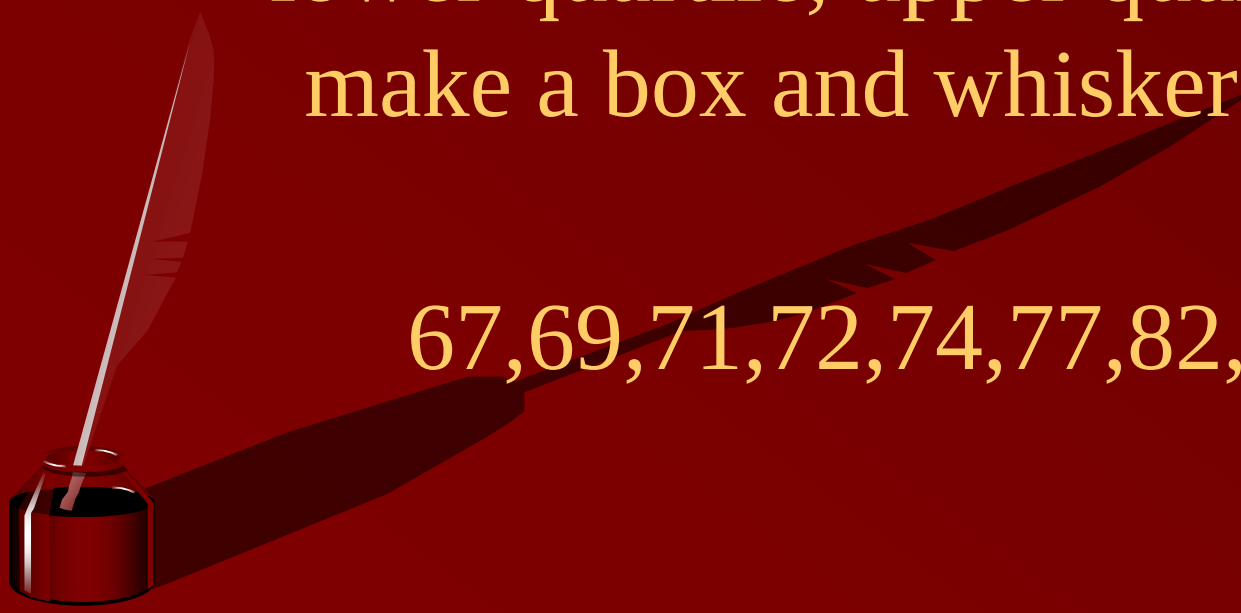
Complete the box and add the whiskers.



Box and Whiskers

Given the set of data, find the median, lower quartile, upper quartile, and make a box and whiskers graph.

67,69,71,72,74,77,82,87,88



Box and Whiskers

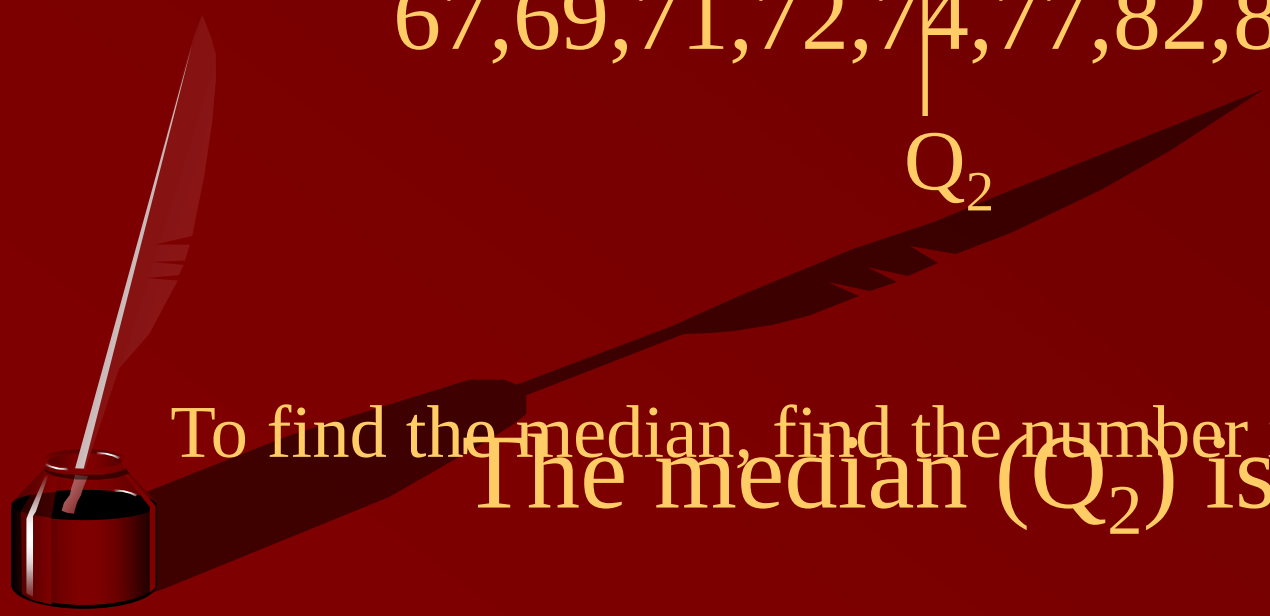
First put the numbers in the order from smallest to the largest.

67,69,71,72,74,77,82,87,88

Q_2

To find the median, find the number in the middle.

The median (Q_2) is 74.



Box and Whiskers

lower 50%

67,69,71,72,74,77,82,87,88

Q_1

To find the lower quartile, find the number in the middle of the lower 50% set of the data.

Two numbers are in the middle, so we must find the average of 69 and 71.

69 + 71 = 140, then 140/2 = 70

The lower quartile (Q_1) is 70.

Box and Whiskers

upper 50%

67,69,71,72,74,77,82,87,88

Q_3

To find the upper quartile, find the number in the middle of the upper 50% set of the data.

Two numbers are in the middle, so we must find the average of 82 and 87.

82 + 87 = 169, then 169/2 = 84.5

The upper quartile (Q_3) is 84.5.

Box and Whiskers

67, 69, 71, 72, 74, 77, 82, 87, 88

Q_1 Q_2 Q_3

To make a box and whiskers graph.

Create a number line starting with 60.

Plot all the points.

Put vertical lines at each Q_1 , Q_2 , Q_3.

Complete the box and add the whiskers.