



Eurovision Maths

Here are the points scored by the UK in Eurovision for the last 55 years.

6, 16, 25, 24, 10, 28, 17, 26, 47, 28, 18, 26, 98, 114, 123, 14, 138, 164, 121, 61, 73, 106, 136, 76, 79, 73, 100, 72, 47, 136, 130, 87, 47, 139, 164, 63, 76, 77, 226, 167, 38, 28, 28, 111, 0, 29, 18, 25, 19, 14, 173, 10, 100, 12, 23

Working out the mean of all these numbers would be a hard task! So we put the data into a frequency table.

- 1) What is the highest number in our data?
- 2) What is the lowest number in our data?
- 3) What, therefore, is the range of our data?

To make our calculation easier, we need to group together the data. This will give us an ESTIMATE of the mean rather than the exact number. Here is one example of how you could group together this data. Fill out the table below.

Score	Tally	Frequency	Mid-Point	Mid-Point x Frequency
0-39				
40-79				
80-119				
120-159				
160-199				
200-239				

$$\text{Mean Score} = \frac{\text{Total of 'Mid-point x Frequency'}}{\text{Total of frequency}} =$$

Now work out the actual mean of the data using the list. What do you notice?

Extension: Repeat for Ireland and Spain's Scores. Which country does better in the contest? How do you know?



Here are the points scored by Ireland in the Eurovision Song Contest for the last 55 years.

11, 14, 22, 18, 10, 32, 79, 72, 80, 11, 68, 54, 119, 86, 80, 143, 105, 49, 0, 137, 91, 96, 172, 79, 21, 132, 47, 155, 187, 226, 44, 162, 157, 64, 18, 92, 6, 0, 53, 7, 0, 93, 5, 0, 0, 25, 119, 46, 5

Create your own frequency table and estimate the mean score for Ireland in the contest.



Here are the points scored by Spain in the Eurovision Song Contest for the last 52 years.

8, 0, 2, 1, 0, 9, 9, 29, 18, 8, 116, 83, 125, 10, 53, 11, 52, 65, 116, 38, 38, 52, 0, 106, 36, 51, 10, 58, 88, 96, 119, 37, 58, 17, 119, 17, 96, 21, 1, 18, 76, 81, 81, 87, 28, 18, 43, 55, 23, 68, 50, 97, 8

Create your own frequency table and estimate the mean score for Spain in the contest.