



How the mean, median and standard deviation are calculated for the Happiness Alliance's Happiness Index:

Standard Deviation Calculation:

$$\sigma = \sqrt{\frac{\sum(x - \bar{x})^2}{N}}$$

where

σ = the standard deviation

x = each value in the population

\bar{x} = the mean of the values

Median Calculation:

100, 70, 50, 60, 10, 30, 80, 40, 20, 10, 90, 20, 10, 40, 90.

When we put those numbers in order we have:

10, 10, 10, 20, 20, 30, 40, 40, 50, 60, 70, 80, 90, 90, 100.

There are fifteen numbers. Our middle is the eighth number.

The median value of this set of numbers is 40.

Mean Calculation:

Mean of these numbers:

60, 10, 50.

Add the numbers: $60 + 10 + 50 = 120$.

Divide by how many numbers (there are 3 numbers): $120 / 3 = 40$.

The Mean is 40.