

1. Find the mean, median, range and standard deviation of the array

4.5, 4.1, 6.8, 3.5, 4.4.

2. The times taken for 8 students to complete a standard task have been measured (correct to the nearest minute) as

27, 31, 27, 33, 28, 30, 35, 25

Find the mean and median of the sample.

3. Find the range and standard deviation of the data in problem 2.

4. The diameter of a circle has been measured 3 times and the following results obtained:

26.2, 26.5, 25.9

Find the mean diameter and the standard deviation from this mean.

5. The tensile strength in megapascals for 15 samples of tin were determined and found to be:

34.61, 34.57, 34.40, 34.63, 34.63, 34.51, 34.49, 34.61, 34.52, 34.55, 34.58, 34.53, 34.44, 34.48 and 34.40.

Calculate the mean and standard deviation from the mean for these 15 values, correct to 4 significant figures.

[Note: You don't need to understand anything about tensile strength in order to answer this question.]

6. 20 readings of external temperature have been taken at 12 noon on consecutive days in September and the results recorded as follows (correct to the nearest 0.1 °C):

14.7	11.5	13.1	11.4	11.4	11.6	13.6	11.4	11.8	12.7
13.8	9.8	13.2	12.5	13.0	13.4	11.0	12.6	11.3	12.8

Calculate the mean temperature and the standard deviation from the given data.