Mean and Standard Deviation

(Use in connection with [Mean and Standard Deviation](#) table)

1. How many students are in the class?

2. What is the mid interval between 2 and 4?

3. What is another name for, how often an item occurs in an interval?

4. By clicking the Step 1 arrow, calculate the mid interval values for all the intervals. List them below.

5. Click the arrow for Step 2. What did this stage do?

6. What 2 sets of figures does one need to calculate the mean?

7. List 3 stages for calculating the mean of a set of data in a frequency table.

8. What does Step 4 do?

9. Notice Step 4, changes all the numbers to positives, does that mean that it does not matter which side of the mean the spread is? Comment on your answer.

10. **How much spread was caused by the 4 - 6 Interval?**

11. **Write out the formula for Standard Deviation? (Note the Mean and Standard Deviation records things correct to 1 decimal place.)**

12. **Using the table, list the 5 stages for finding the Standard Deviation.**

13. **By changing the table determine what the effect of 4 of the students, who normally spent 1-2 hours at sport, spending 12-14 hours at sport.**

14. **What do you think will be the effect on the table, if students are very busy in a period just before their exams?**

15. **If all the students got flu and were not able to take part in sports, what would the effect be?**

16. **Which 5 students would need to leave the class in order to have the greatest effect on the mean? You can change the figures in the table.**

17. **In order to increase the mean, what type of students would need to join the class? You can change the figures in the table.**