## National 5 Homework : 1 year course Statistics



1. Here is a table of exam results for ten pupils:-

Maths results	20%	35%	60%	90%	45%	70%	85%	10%	65%	30%
Physics results	35%	30%	55%	95%	40%	75%	80%	20%	50%	35%

- (a) Display these results on a scatter graph.
- (b) Describe the correlation of the graph.
- (c) Draw a line of best fit.
- (d) Find the equation of the line of best fit.
- (d) Use the equation to calculate what the maths result would be for someone who scored 50% in maths
- 2. Write down the quartiles for this set of data.

2, 3. 5, 5, 8, 12, 15, 21, 22, 25, 32, 32, 35, 37

- 3. Find the semi-interquartile range for this list of data.
  - 12, 4, 15, 6, 9, 10, 13, 8, 6, 7, 5, 7, 11
- 4. (a) The pulse rates, in beats per minute, of 6 adults in a hospital waiting area are:-

68 73 86 72 82 78

Calculate the mean and standard deviation of this data.

(b) 6 children in the same waiting area have a mean pulse rate of 89.6 beats per minutes and a standard deviation of 5.4.

Make **two** valid comparisons between the children's pulse rates and those of the adults.

