

S1 Level 3 Formal Homework  
(Show all working!)

# Statistics

**Non Calculator Section:**

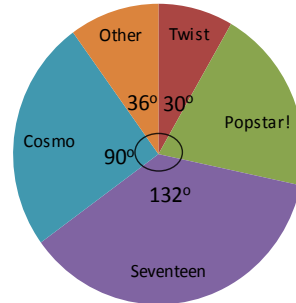
If working is not shown for this section then no marks will be awarded.

1.      a)  $145.6 + 4251.71$                       b)  $455 \div 4$                       c)  $126 \div 30$

2.      300 girls voted for their favourite magazine.  
The results are shown in the pie chart.

How many girls voted for:

- (a) Cosmo  
(b) Popstar!



3.      A class of pupils were asked to name their favourite school subject.  
The results (in no particular order) are as follows:

P.E.	Music	Music	P.E.	Science	Maths	Maths	Geography	P.E.	Maths
Maths	P.E.	P.E.	Music	Geography	P.E.	Music	Science	Maths	P.E.
Science	Maths	P.E.	P.E.	Science	Maths	P.E.	Geography	Music	Science

- (a) Make a frequency table to show the results.  
(b) Draw and label a neat bar graph of the results.

4.      The points awarded by judges at a gymnastics competition are:-  
7.2    8.4    7.9    9.3    8.2    7.7    8.1    8.8    8.2

- (a) Find the mean points awarded.  
(b) What was the modal score?  
(c) Find the median number of points.  
(d) How many marks below the mean was the lowest score?  
(e) How widely spread are the marks?  
(f) Draw and label a neat stem and leaf diagram of the scores.

5.      A box of chocolates contains 4 white, 6 dark and 20 milk chocolates.  
What is the probability that the first chocolate chosen at random will be:-

- (a) dark chocolate                      (b) milk chocolate                      (c) **not** white chocolate

**Revision Section:**

Solve these equations:-

6.      (a)  $5x + 6 = 36$                       (b)  $10y - 12 = 6y + 24$

7.      Multiply out the bracket and simplify:-

- (a)  $7(x + 3) - 10$