LAVINGTON GIRLS SECONDARY SCHOOL

FORM FOUR MATHEMATICS HOLIDAY ASSIGNMENT

NAME _____**ADM NO**_____**CLASS**_____

An example of practice question that is comprehensive.

1. Line L_1 passes through (3, 3) and (5, 7).
   (a) Find the equation of the line L_1 in form of $y = mx + c$ where m & c are constant.

   (b) Line L_2 is parallel to L_1 and passes through points (1, 5). Find its equation in form of $ax + by = c$ where a, b and c are integers.

   (c) Line L_3 is parallel to L_1 and passes through points (1, 5). Find its equation in form of $\frac{x}{a} + \frac{y}{b} = 1$ (double intercept)

   (d) Find the x and the y intercept of L_1.

   (e) Find the point of intersection between line L_1 and L_2.

   (f) Find the angle line L_1 makes with x-axis leaving your answer to 4 significance figures.

   (g) Find the equations of perpendicular bisector / mediator / equidistant between point (3,3) and 5,7) leaving your answer in form of $ax + by + c = 0$.

   (h) On the grid provided draw line L_1, L_2 and L_3.

   (i) Use the graph to find the point of intersection between L_1 and L_2.

   (j) Find the magnitude between point A and B.

2. The marks scored by students in a mathematics exam were as follows:

   | 36 | 53 | 64 | 82 | 72 | 53 | 30 |

42	66	33	86	62	48	25
73	73	29	55	75	80	60
81	81	40	47	45	73	62
45	51	57	63	52	69	35
37	77	39	75	63	57	44

(a) Starting with 25 and class interval of 10 develop frequency distribution table.

(b) State the modal class.

(c) State the modal.

(d) Calculate the median mark.

(e) Calculate the mean mark.

(f) Draw the histogram to represent the above data.

(g) Draw frequency polygon to represent the above data.

(h) Use the histogram above to find the median mark.

(i) On the histogram draw a vertical line to show where median lies.

(j) Use the histogram to find the percent of student who scored 64 and above.