**ES KANOMBE/EFOTEC**

**KIGALI CITY**

**WORK OF MATHEMATICS FOR SENIOR THREE ALL**

1. Find the equation of straight line which passes through points (7, 10) and (9, 14).
2. Given that find the value of
3. half distance betueen two numbers is 3, the sum of the greater number and twice the smaller number is 13 . Find the two numbers
4. Given that vectors
5. solve the following simultaneous inequalities and show the solution set on the number line.
6. find the equation of a line with intercept -4 and intercept is 3.
7. find the equation of a line which passes through the point (3,5) and is parallel to
8. a line passing through the points (-2,4) and (3,5) is parallel to the line passing through the points (a,6) and (-4,1) ,Find a.
9. Find the equation of the line passing through (5,2) which is :

a)parallel

b) perpendicular to the line

11.the table below shows a frequency distribution table of the masses of 40 students in a class.

|  |  |
| --- | --- |
| Mass (kg) | Frequency |
| 41-45 | 3 |
| 46-50 | 7 |
| 51-55 | 12 |
| 56-60 | 10 |
| 61-65 | 6 |
| 66-70 | 2 |

a) State the model class.

b) Use a working mean of 48 to calculate the mean mass of the students

c) Draw a histogram of the data , and then estimate the mode

d) Draw a cumulative frequency curve (ogive) of the distribution.

e) Estimate the median.

12. The expression is exactly divisible by and on division by gives a remainder of -12. calculate the values of a and b and factorize the expression completely.

13. Find the base n if where n/N.