13. At a certain school, it was discovered that the ratio of decrease in number of disciplinary cases to increase in the number of teachers on duty is directly proportional to the number of teachers on duty at any one time. If the number of discipline cases changed from 9 to 2 when the number of teachers on duty changed from 2 to 4.

(a) Form an equation relating number of discipline cases to number of teachers on duty. (09 marks)

(b) Find the minimum number of teachers that should be on duty to eliminate discipline cases completely. (03 marks)

... and t respectively. If O is the

$\overline{dN}$

$d : t$

$\dfrac{dN}{dc} \propto N$