**The City School**

North Nazimabad Boys Branch

Grade 9 Mathematics

**Topic: Direct Proportion**

Mr. Mohsin Zaki

Q1: Given that R is directly proportional to S and that R =140 when S =5, find the constant of proportion and calculate the value of S when R =140.

Q2: If d is directly proportional to t2, and if d = 27 when t = 3, find an equation giving d in terms of t.

Q3: The value of a mirror exceeding 10m2 in area varies directly as the square of its area. Given that a 60-m2 costs $400, find the price of a 45-m2 mirror.

Q4: Given that A is directly proportional to B and that A = 5/3 when B = 5/6, find A when B=1/3 and B when A =15/2.

Q5: If y is directly proportional to x, if y = 6 when x = 2

1. express y in terms of x
2. find the value of x when y =12.