**The City School**

**North Nazimabad Boys Branch**

**Mathematics ( Grade 9)**

**Topic: Coordinate Geometry**

**Mr. Mohsin Zaki**

Q1) Does (3, 4) lie on the line with equation 3x 2y - 1=0?

Q2) Does (-2, 5) lie on the line with equation 5x + 3y = -5?

Q3) Find k if (3, 4) lies on the line with equation x - 2y - k = 0

Q4) Find r if (1, 5) lies on the line with equation 4x - 2y = r

Q5) Find the gradient of the line with equation:

1. 3x + y - 7=0
2. 2x - 7y = 8

Q6) A straight line has a gradient of 2 and passes through the point (0,-3).

1. Write down the equation the straight line
2. Given that the line also passes through the point (4,k). find the value of k.

Q7) The equation of a straight line *l* is 5y + 12x – 60 = 0

1. The line *l* cuts the x axis at P and y axis at Q. Write down the coordinates of P and Q.
2. Find out the length, gradient, mid point and equation of PQ
3. The line x = 0 is the axis of symmetry for the triangle PQR. Write down the coordinates of PQR