## The City School

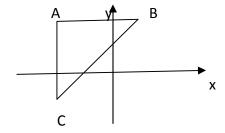
## **Boys Campus North Nazimabad**



**Topic: Inequalities** 

## Paper 1:

Q1:



The triangle ABC has vertices A(-3, 5), B(3, 5) and C(-3, -1). The equation of the line BC is

y = x + 2. Write down the three inequalities which define the region inside the triangle ABC.

This region does not include points on the boundaries. [3]

Q2: Solve the inequality a-2 < 4(5-a). [2]

Q3: a) solve the inequality 7-y<9. [1]

b) Write down the least integer value of z for which z>-4. [1]

Q3: Given that y is an integer and -3 < 2y - 6 < 4, list the possible values of y. [2]

Q4: Solve  $-7 \le 3x - 4 < 2$ . [2]

Q5: Find all the integers which satisfy both 2x + 7 < 3 and  $x \ge -4$ . [1]

Q6: Solve the inequality 4k - 1, 14 + k. [1]