

Std.IX Section : _____

Subject : Mathematics

Marks : 20

Date : _____

Periodic Test - III

Name : _____ Roll No. _____

Time : 1:00 Hr.

General Instructions -

- 1) The paper is divided into 4 sections A, B, C and D.
- 2) Section A (Each question carries 1 mark) Total 6 Marks
- 3) Section B (Each question carries 2 marks) Total 4 Marks.
- 4) Section C (Each question carries 3 marks) Total 6 Marks.
- 5) Section D (Each question carries 4 marks) Total 4 Marks.

Section A (each question carries 1 mark)**6M**

Q.1 : Write down any two Euclid's postulates.

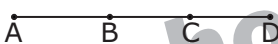
Q.2 : In which quadrants the following points lie.

i) (2, 3)

ii) (-3, 5)

iii) (6, -7)

iv) (-4, -1)

Q.3 : Find the value of k, if $x = 1$, $y = 2$ is a solution of the equation $2x + 3y = k$.Q.4 : If $AC = BD$ then prove that $AB = CD$.

Q.5 : Write the answer of each of the following questions :

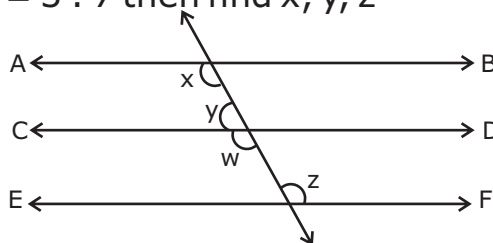
- i) What is the name of horizontal and the vertical lines drawn to determine the position of any point in the cartesian plane?
- ii) What is the name of each part of the plane formed by these two lines?

Q.6 : Write two solutions for the following equation : $x + y = 7$ **Section B (each question carries 2 marks)****4M**Q.7 : Express each of the following decimals in the $\frac{p}{q}$ form (i) $0.\overline{5}$ (ii) $0.\overline{31}$ Q.8 : Find the value of polynomial $2x^3 + 3x^2 + 4x + 1$ at (i) $x = 0$ (ii) $x = 1$

Section C (each question carries 3 marks)

6M

Q.9 : If $AB \parallel CD$, $CD \parallel EF$ and $y : z = 3 : 7$ then find x, y, z



Q.10 **A)** Find the area of a triangle, two sides of which are 18 cm and 10 cm and the perimeter 42 cm.

OR

Q.10 **B)** Find the cost of laying grass in a triangular field of sides 50 m, 65 m and 65 m at the rate of 7 per m^2 .

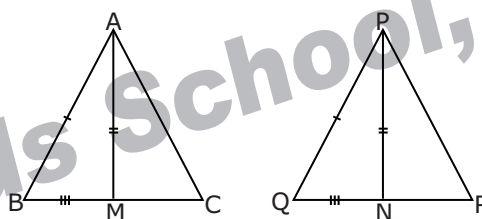
Section D (each question carries 4 marks)

4M

Q.11 **A)** Two sides AB and BC and median AM of one triangle $\triangle ABC$ are respectively equal to sides PQ and QR and median PN of $\triangle PQR$. Show that

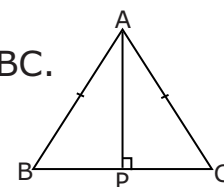
i) $\triangle ABM \cong \triangle PQN$

ii) $\triangle ABC \cong \triangle PQR$



OR

B) i) Given- $\triangle ABC$ is isosceles triangle with $AB = AC$ and $AP \perp BC$.
To prove : $\angle B = \angle C$



ii) In $\square ABCD$, $AC = AD$ and
AB bisects $\angle A$ then show that $\triangle ABC \cong \triangle ABD$

