પુના International School
Shree Swaminarayan Gurukul, Zundal

Examination P A 2020 – 21					
Student Name				**Grade** 9^{th}	
Date	**17/07 /20**			**Subject**	**MATHEMATICS**
		Time		**Total Marks**	**50**

Choose correct options **[1X10 = 10]**

1 The absolute value of | - 23 | is

(A) - 23 (B) 23 (C) 0 (D) None

2 The smallest prime number is

(A) 0 (B) 2 (C) 1 (D) None

3 Any point on the X axis is of the form

(A) (x, y) (B) (x, 0) (C) (x, -y) (D) (0, y)

4. Which of the following equation has graph parallel to Y-axis?

(A) y = - 2 (B) x = 1 (C) x – y = 2 (D) x + y = 2

5. A surface is that which has

(A) Length and breadth (B) Length only

(C) Breadth only (D) Length and height

6. The number of lines that can pass through a given point is

(A)Two (B) None (C) only one (D) infinitely many

7. The equation 2x + 5y = 7 has a unique solution, if x and y are

(A) Natural number (B) Positive Real Number

(C) Real Number (D) Rational Number

8 If (2, 0) is a solution of the linear equation 2x + 3y = k, then the value of k is

(A) 4 (B) 5 (C) 6 (D) 2

9. The smallest whole number is

(A) 0 (B) 2 (C) 1 (D) None

10. The number of dimensions, a solid has

(A) 1 (B) 2 (C) 3 (D) 0

Solve: Each carry 1 mark **[1 X 6= 6]**

11. Find the value of k, if x = 2, y = 1 is a solution of the equation 2x + 3y = k

12. If (2, 0) is a solution of the linear equation 2x + 3y = k, then the value of k is

13. The cost of a notebook is twice the cost of a pen. Write a linear equation in two variables to represent this statement. (Take the cost of a notebook to be Rs *x* and that of a pen to be Rs *y*).

14. Express the following linear equations in the form $ax + by + c = 0$ and indicate the values of *a*, *b* and *c* in each case: 2x + 3y = 9.35

15. If (x + 2, 4) = (5, y – 2), then find the coordinates (x, y)

16. is zero a rational number? Can you write it in the form p/q, where p and q are integer's ≠ 0?

17. TRUE OR FALSE **[1 X 10 = 10]**

(i) Every integer is a rational number
(ii) Every rational number is a integer.
(iii) Every whole number is a Natural number
(iv) Every integer is a whole number
(v) Every rational number is a whole number
(vi) In second quadrant, abscissa of a point is negative.
(vii) X and Y Axes are intersect each other at origin
(viii) Point (2, 0) lie in second quadrant.
(ix) Point (4, 2) lie in first quadrant.
(x) A point book of whose coordinates are negative will lie in third quadrant.

Solve: Each carry 3 marks (Any four) **[3 X 4 = 12]**

18. Find six rational numbers between 3 and 4

19. Locate $\sqrt{2}$ on the number line

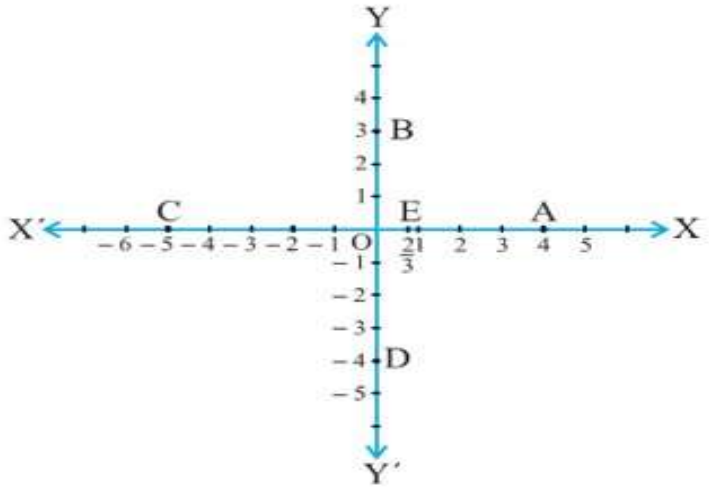
20. Write four solution for 2x + y = 7

21. Write four solution for x - 4 y = 0

22. Express 0.6 in the form p/q

23. Find: (i) $64^{\frac{1}{2}}$ (ii) $32^{\frac{1}{5}}$

24. Write the coordinates of the points marked on the axes in given figure

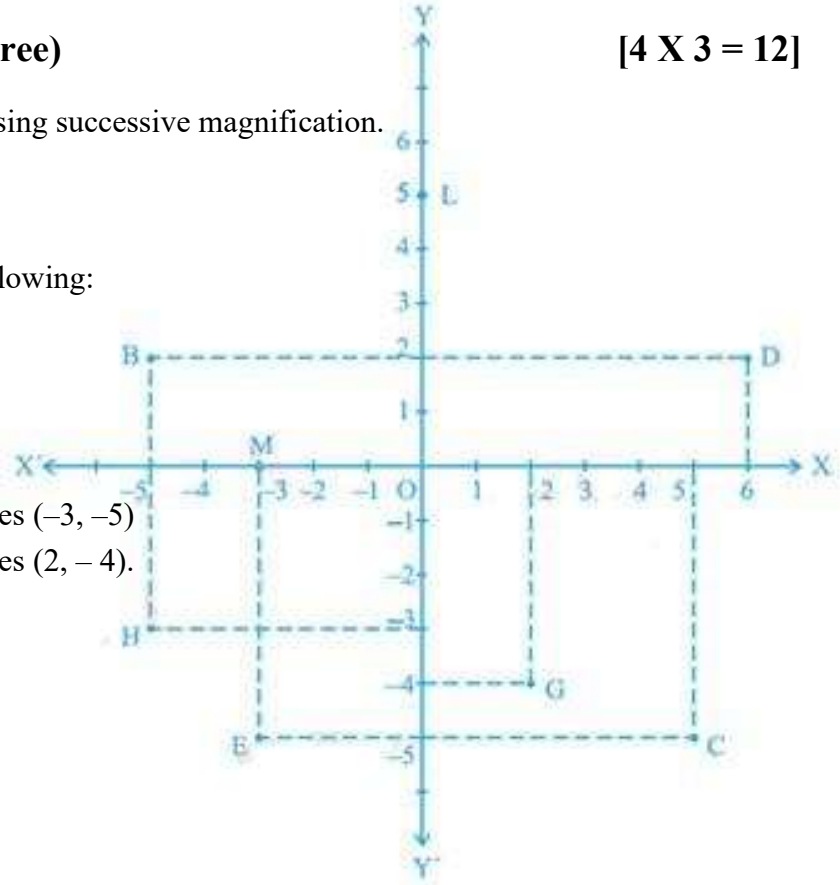


Solve: Each carry 4 marks (Any Three) **[4 X 3 = 12]**

25. Visualize 3.765 on the number line, using successive magnification.

26. Express 3. 142678 in the form $\frac{p}{q}$

27. See in below figure, and write the following:



of the point M.

(i) The coordinates of B.
(ii) The coordinates of C.
(iii) The point identified by the coordinates (–3, –5)
(iv) The point identified by the coordinates (2, – 4).
(v) The abscissa of the point D.
(vi) The ordinate of the point H.
(vii) The coordinates of the point L.
(viii) The coordinates

28. Draw the graph of each of the following linear equations in two variables: x + y = 4

29. Draw the graph of each of the following linear equations in two variables: x – y = 2