

SARALA BIRLA PUBLIC SCHOOL

Mahilong, Ranchi.

Revision Test-2(Mathematics)[29.1.2020]

Class - IX



1 Mark questions

- Q1. What is the name of horizontal and the vertical lines drawn to determine the position of any point in the Cartesian plane?
- Q2. If a cone and a cylinder has same radius and height then what is the relation between their volume ?
- Q3. What is the minimum and maximum value for the Probability of happening an event ?
- Q4. Write the equation of a line passing through (5,8).
- Q5. Make the figure of a parallelogram and a triangle on the base and between same parallels.

2 Marks questions

- Q6. Find the value of k , if $x = 2$, $y = 1$ is a solution of the equation $2x + 3y = k$.
- Q7. Two coins are tossed simultaneously 500 times and we get, Two heads : 105 times and one head : 275 times. Find the probability of getting: i. Two tails ii. At least 1 head
- Q8. In which quadrant or on which axis does these points $(-3,-7)$, $(0,-6)$, $(2,-2)$, $(5,0)$ lie?
- Q9. Prove that sum of the angles of a triangle is 180° .

3 Marks questions

- Q10. Prove that the chords equidistant from the centre of a circle are equal in length.
- Q11. The diameter of the moon is one fourth of the diameter of the earth. What fraction of the volume of earth is the volume of moon?
- Q12. Ray OS stands on a line POQ. Ray OR and Ray OT are angle bisectors of POS & SOQ respectively. If $\angle POS = x$, find the measure of $\angle ROT$. Also draw figure.
- Q13. Three girls Reshma, Salma and Mandip are playing a game by standing on a circle of radius 5 m drawn in a park. Reshma throws a ball to Salma, Salma to Mandip, Mandip to Reshma. If the distance between Reshma and Salma and between Salma and Mandip is 6 m each, what is the distance between Reshma and Mandip?
- Q14. Construct a triangle ABC in which $BC = 7$ cm, $\angle B = 75^\circ$ and $AB + AC = 13$ cm.

4 Marks questions

- Q15. The taxi fare in a city is as follows: For the first kilometre, the fares is Rs. 8 and for the subsequent distance it is Rs. 5 per km. Taking the distance covered as x km and total fare as Rs. y , write a linear equation for this information, and draw its graph. Does point $(5,28)$ lie on it?
- Q16. D, E and F are respectively the mid-points of the sides BC, CA and AB of a ΔABC .
Show that (i) BDEF is a parallelogram. (ii) $4 \text{ ar } (DEF) = \text{ar } (ABC)$ (iii) $2 \text{ ar } (BDEF) = \text{ar } (ABC)$
- Q17. A metal pipe is 77 cm long. The inner diameter of a cross section is 4 cm, the thickness of metal being 4 mm. Find its total surface area. What is the cost of painting its inside at Rs. 15 per cm^2 .