



Mathematics Sample Question Paper
for
Entrance Examination for Class – IX

Time: 01 Hour

Max. Marks: 100

Section - A (1 Mark each)

1. The decimal form of number: 13.85×10^{-4} is
2. Reciprocal of $(-\frac{5}{3}) \times (-\frac{6}{15})$ is
3. $(0.01)^3 =$
4. $(30xy^4) \div (\frac{5}{6}x^3y) =$
5. The probability of getting one a doublet on toss of two dice is
6. 20 men will complete a work indays, which is completed by 15 men in 18 days.
7. Factors of $x^4 - 16$ are
8. An angle which double of its complement is.....
9. Point $(4, -4)$ lies inQuadrant.
10. $\left[\left\{ (5^2 + 6^2)^{\frac{1}{2}} \right\}^{-4} \right]^{\frac{1}{2}} =$

Section - B (5 Marks each)

11. What should be subtracted from $\frac{1}{3} - \frac{1}{4} + \frac{1}{6}$ to make it $\frac{3}{8}$?

12. Find 'n' if $7^{2n} \div 7^{-4} = 7^{n-1} \times \frac{7^3}{7^5}$.

13. Factorize: $16z^4 - (2x + z)^4$.

14. Simplify: $a^3(b^2 - 3a) - 2b(a^2b - 2a^3b) + 3a^2(4 - 2b^2)$

15. Solve the equation: $3x - \frac{2x-3}{5} + 30 = \frac{8x+9}{3}$

16. Evaluate: $\frac{\sqrt[4]{625 \times 81}}{\sqrt[3]{(-216) \times (-64)}}$.

17. If $a^2 + b^2 = 16$ & $ab = 8$, then find value of $a - b$.

18. What must be added to the number 21305 so that it becomes a perfect square and also find the square root of the number so formed?
19. Sum of two opposite angles of a Rhombus is 160° . Find value of each angle of such a rhombus.
20. One number is 40 less than the other and the fraction obtained by dividing smaller number by the bigger number is $\frac{3}{5}$. What are the two numbers ?

Section – C (10 Marks each)

21. From a metallic strip measuring $8\frac{2}{3}$ cm and $2\frac{2}{3}$ cm, a craftsman cuts circular discs of diameter $1\frac{2}{3}$ cm to be used in making some boxes. How many such discs can be cut ? Find area of the metallic strip left unused by the craftsman.

22. Divide: $2x^4 + 9x^3 - 47x^2 + 68x - 32$ by $x^2 + 7x - 8$.

23. Construct a Rhombus whose diagonals are 7 cm and 9 cm.

24. Calculate the amount earned by business man at the end of four years on an investment of Rs.2,50,000 and rate of interest 5 % p a in first year, then 6 % p a in second year and again at a rate of 5 % p a in the third year.