Important Questions of MP Class 9 Maths

1. Write the definition of Median of a triangle and concurrent lines

2. Radius of a circle is 4cm. Construct a regular hexagon circumscribing the circle.

3. Find the probability of getting a number greater than 4, by throwing a cubic dice

4. The compound interest of Rs, 1800 at the rate of 10% annual for some time is Rs, 378. Find the time period

5. Find the curved surface area of a right circular cone whose slant height is 10 cm and base radius is 7 cm

6. The height (in cm) of 9 students of a class are as follows:
   155   0 145 149 150 147 152 144 148 find the median of this data.

7. Rationalise the denominator of $\dfrac{1}{2 + \sqrt{3}}$

8. Write the definitions of the following:
   (i) Intersecting lines (ii) Non-intersecting lines

9. Evaluate 105 x 106 without multiplying directly

10. Prove that the line drawn through the centre of a circle to bisect a chord is perpendicular to the chord

11. Let U be the set of all triangle in a given plane. If A is the set of all those triangles whose at least one angle is different from 60 degrees, then what will be the set A'?

12. In a class of 40 students, 25 like cricket and 15 football. A student like at least one of the games. How many students like both the games i.e. cricket and football?

13. If A and B are two sets such that A has 12 elements, B has 17 elements, and AUB has 21 elements, how many elements does A B   have?

14. If the polynomial $p(x) = 5x^4 - 4x^3 + 3x^2 - 2x + 7$ is divided by $x - 5$, then find the remainder

15. Assuming that x, y, z are positive real numbers, exponents are all rational number, show that

16. Prove that log = log 2 + 2 log 5 -log 3 -2 log 7

17. Find cube root of 48, correct to two places of decimals

18. A number added to its two-third is equal to 35. Find the number.

19. The age of the man will be 3 times the age of his son in five years from now. How old are the man and his son now?

20. Prove that the quadrilateral formed by joining the mid points of adjacent sides of a rectangle is a rhombus.