

Maths - 10th Class Mathematics English Medium Short Question Preparations

Q1. Define extraneous root.

Ans 1: A root of an equation, which does not satisfy the equation is called an extraneous root.

Q2. Define theorem of dividendo ?

Ans 1: if $a : b = c : d$, then
 $a - b : b = c - d : d$
 $a : a - b = c : c - d$ is called the theorem of dividendo.

Q3. Define synthetic division.

Ans 1: Synthetic division is the process of finding the quotient and remainder, when a polynomial is divided by a linear polynomial.

Q4. How a class boundary is obtained ?

Ans 1: A class boundary is obtained by adding two successive class limits and dividing the sum by 2.

Q5. What is cartesian product ?

Ans 1:

Q6. Define mean proportional.

Ans 1: If three quantities are related as $a : b :: b : c$ then b is called the mean proportional.

Q7. Define Median.

Ans 1: Median is the measure which determines the middle most observation in a data set. It divides the data set into equal parts.

Q8. Write distributive property of union over intersection.

Ans 1:

Q9. The length of the side of a regular pentagon is 5cm what is its perimeter ?

Ans 1:

Q10. Find the sum of the roots and product of the roots of the equation $x^2 + 4x - 9 = 0$

Ans 1:

Q11. Solve by quadratic formula, $5x^2 - 9x - 2 = 0$

Ans 1:

Q12. How can we write proportion symbolically ?

Ans 1: Symbolically, we can write the proportion of a, b, c and d.
As $a : b :: c : d$

Q13. Solve the equation $7x^2 + 8x + 1 = 0$ by factorization ?

Ans 1:

Q14. Write down the properties of arithmetic mean.

Ans 1:

Q15. What is chord ?

Ans 1: The line joining the two points of circle is called chord.

Q16. How can we find the sum of the roots of a quadratic equation ?

Ans 1:

Q17. If the discriminant is -6, then what is the nature of the roots ?

Ans 1: As the discriminant is negative, therefore the roots of the equation are imaginary and unequal.

Q18. Define quadrantal angles.

Ans 1: If the terminal side of an angle in standard position falls on x-axis or y-axis, then it is called a quadrantal angle.

Q19.

Ans 1:

Q20. What is antecedent ?

Ans 1: In ratio $a : b$, the first term a is called antecedent.
