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(Affiliated to CBSE up to +2 Level)

CLASS: X   SUB.: MATHS (NCERT BASED)   DATE: 23 -07-2020

REVISION

1. Write the statement of 'Fundamental Theorem of Arithmetic.

2. Find the zeroes of the quadratic polynomial x²-x-132.

3. Find the roots of the quadratic equation $3x^2 - 2\sqrt{6}x + 2 = 0$, by factorization.

4. Solve the pair of equations: $\dfrac{2}{x} + \dfrac{3}{Y} = 13$; $\dfrac{5}{x} - \dfrac{4}{y} = -2$

5. Show that $6 + \sqrt{2}$ is irrational number.

6. Find all the zeroes of $2x^4 - 3x^3 - 3x^2 + 6x - 2$, if you know that two of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$.

7. A boat goes 30 km up stream and 44 km downstream in 10 hours. In 13 hours, it can go 40 km upstream and 55 km downstream. Determine the speed of the stream and that of the boat in still water.

8. A motor boat whose speed is 18 km/h in still water takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream.

9. Solve graphically $x + 3y = 6$ $2x - 3y = 12$

10. A train travels 360 km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less for the same journey. Find the speed of the train.