NPET'S ENGLISGH MEDIUM SCHOOL
CLUB ROAD BELGAUM

FA-2 Revision for Class X 2024-25

1. Find the zeros of the quadratic polynomial $x^2 + 7x + 12$ and verify the relation between the zeros and its coefficients.
2. Find the zeros of the quadratic polynomial $p(x) = 6x^2 - 3$ and verify the relationship between the zeros and its coefficients.
3. Find the zeros of the polynomial $f(u) = 4u^2 + 8u$ and verify the relationship between the zeros and its coefficients.
4. Find the zeros of the quadratic polynomial $6x^2 - 3 - 7x$ and verify the relationship between the zeros and the coefficients.
5. If α and β are the zeros of the quadratic polynomial $f(x) = x^2 - px + q$, then find the values of (i) $\alpha^2 + \beta^2$ (ii) $\frac{1}{\alpha} + \frac{1}{\beta}$
6. The product of two consecutive positive integers is 240. Formulate the quadratic equation whose roots are these integers.
7. Sum of the areas of two squares is $468m^2$. If the difference of their perimeters is $24m$, formulate the quadratic equation to find the sides of the two squares.
8. Find a quadratic polynomial whose sum and product of its zeros is 4 and 1.
9. Check whether $x^2 - 2x = (-2)(3 - x)$ is a quadratic equation or not.
10. Is $(x - 2)(x + 1) = (x - 1)(x + 3)$ a quadratic equation? Justify.
11. Solve for following quadratic equations by factorization method.

$(i)\ \frac{x}{x+1} + \frac{x+1}{x} = \frac{34}{15}$ $(ii)\ \frac{x+3}{x-2} - \frac{1-x}{x} = \frac{17}{4}$

$(iii)\ \frac{x-1}{x+2} + \frac{x-3}{x-4} = \frac{10}{3}$ $(iv)\ \frac{1}{x+1} + \frac{2}{x+2} = \frac{4}{x+4}$

12. Find a quadratic polynomial whose sum and product of its zeros is 4 and 1.
13. Roman's mother is 26 years older than him. The product of their ages 3 years from now will be 360. We would like to find Roman's present age. Write down relevant quadratic equation
14. Is it possible to design a rectangular mango grove whose length is twice its breadth, and the area is 800sq.m? If so, find its length and breadth.
15. A chess board contains 64 equal squares and the area of each square is $6.25cm^2$. A border round the board is 2 cm wide. Find the length of the side of the chess board.