

EXTRA WORK SHEET ON FORMATION OF POLYNOMIAL FROM ZEROES

1. Find the sum and product of the roots for each of the following quadratic equations :

(i) $x^2 + 8x - 65 = 0$

(ii) $2x^2 + 5x + 7 = 0$

(iii) $kx^2 - k^2x - 2k^3 = 0$

2. Form a quadratic polynomial whose roots are 2, and $-1/2$.

3. Find the quadratic polynomial with rational coefficients which has $\frac{1}{3+2\sqrt{2}}$ as a root.

4. What is an equation whose roots are $5 + \sqrt{2}$ and $5 - \sqrt{2}$

5. Write down the quadratic equation in general form for which sum and product of the roots are given below.

(i) 9, 14

(ii) $-7/2$, $5/2$

(iii) $-3/5$, $-1/2$