Chapter – 2

Worksheet – 2

1) ***If one zero of $2x^2 - 3x + k$ is reciprocal of the other, then the value of k is :***

(A) 2 ***(B)*** $\frac{-2}{3}$ ***(C)*** $\frac{-3}{2}$ ***(D) -3***

2)

If α, β are zeroes of $x^2 - 6x + k$. What is the value of k, if $3\alpha + 2\beta = 20$?

(A) -16 ***(B) 8***

(C) -2 ***(D) -8***

3)

If α and β are the zeroes of the polynomial $4x^2 + 3x + 7$, then $\frac{1}{\alpha} + \frac{1}{\beta}$ is equal to :

(A) $\frac{7}{3}$ (B) $-\frac{7}{3}$ (C) $\frac{3}{7}$ (D) $-\frac{3}{7}$

4)

Find a quadratic polynomial, the sum and product of whose zeroes are 0 and $-\frac{3}{5}$ respectively. Hence, find the zeroes. ***[CBSE 2015-K3UG5RL]***

5)

If p, q are zeroes of polynomial $f(x) = 2x^2 - 7x + 3$, *find the value of* $p^2 + q^2$. *[CBSE Sept. 2012]*

6)

If α, β *are the two zeroes of the polynomial* $25p^2 - 15p + 2$, *find a quadratic polynomial whose zeroes are* $\frac{1}{2\alpha}$ *and* $\frac{1}{2\beta}$. *[CBSE Sept. 2010, 2012]*

7)

Find the zeroes of the quadratic polynomial $5x^2 - 2\sqrt{5}x - 3$ and verify the relationship between the zeroes and the coefficients.

[CBSE Sept. 2014]

8)

What should be added in the polynomial $x^3 + 2x^2 - 9x + 1$ so that it is completely divisible by $x + 4$?

[CBSE Sept. 2014]