

## POLYNOMIALS

Lecture #5

# LP : If  $\alpha$  and  $\beta$  are the zeroes of  $5x^2 - 2x - 3 = 0$ , then find the value of  $\alpha - \beta$ .



# LP: If the product of the zeroes of polynomial ax² - 6x - 6 is 4. Find the value of a.

[ CBSE 2008 ]



# LP : If  $\alpha$  and  $\beta$  are the zeros of the polynomial  $f(x) = x^2 - 5x + k$  such that  $\alpha - \beta = 1$ , find the value of k.



#LP: If sum of the squares of zeros of the quadratic polynomial  $f(x) = x^2 - 8x + k$  is 40, find k



#LP: If the zeroes of the polynomial  $x + px^2 + q$  are double in value to the zeroes of the polynomial  $2x^2 - 5x - 3$ , then find the values of p and q.

[ CBSE 2022 - 23 ]

Find the value of k such that the polynomial  $x^2 - (k+6)x + 2(2k-1)$  has sum of its zeroes equal to half of their product.

[ CBSE 2019 ]

## # Making of a Quadratic Polynomial:



#LP: Find a quadratic polynomial where zeroes are  $5 - 3\sqrt{2}$  and  $5 + 3\sqrt{2}$ .



#LP: Find a quadratic polynomial whose sum and product of zeroes are:

i. 2, -1/3

ii. 0, √5



## #LP: The number of polynomials having zeroes as -2 and 5 is

**A.** 1

**B. 2** 

**C.** 3

D. More than 3



## # DPP Discussion



