

**X MATHEMATICS, POLYNOMIALS, WS 2**

- 1) Write a polynomial whose zeros are 2 and - 7.
- 2) Write a polynomial whose sum of zeros is 2 and and product of zeros is - 7.
- 3)If one of the zeros of the polynomial  $3y^2 + 13y - p$  is the reciprocal of the other, find p.
- 4)If  $\alpha$  and  $\beta$  are zeros of the polynomial  $ax^2 + bx + c$  ,find  $\frac{1}{\alpha} + \frac{1}{\beta}$  .
- 5)A curve representing a quadratic polynomial meets the X-axis at (2 ,0) and (-2, 0). Write the quadratic polynomial.
- 6)Can  $x - 1$  be the remainder on division of a polynomial  $p (x)$  by  $2x + 3$ ? Justify your answer.  
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- 7) If the remainder on division of  $x^3 + 2x^2 + kx + 3$  by  $x - 3$  is 21, find the quotient and the value of  $k$ .
- 8) Find the value of k if 2 is the zero of  $3x^2 - 17x + k$ .
- 9) Find the zeroes of the quadratic polynomial  $x^2 + 7x + 10$ , and verify the relationship between the zeroes and the coefficients.
- 10) Divide  $2x^2 + 3x + 1$  by  $x + 2$ .

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