# DELHI PUBLIC SCOOL, JAMMU <br> SESSION 2019-20 <br> SUBJECT: MATHEMATICS ASSIGNMENT TOPIC- POLYNOMIALS 

1. Find zeroes of the quadratic polynomial $2 \mathrm{x}^{2}-50$ ?
2. Find a quadratic polynomial whose product and sum of zeroes are $-13 / 5$ and $3 / 5$, respectively.
3. Find the nature of the zeroes of the quadratic polynomial $x^{2}+99 x+127$.
4. Obtain all the zeroes of the polynomial $x^{4}+4 x^{3}-2 x^{2}-20 x-15$ if two of its two of its zeroes are $\sqrt{ } 5$ and $-\sqrt{ } 5$.
5. Divide $2 x^{4}-9 x^{3}+5 x^{2}+3 x-8$ by $x 2-4 x-1$ and verify division Algorithm.
6. Given that the equation $12 \mathrm{x}^{3}-4 \mathrm{x}^{2}-5 \mathrm{x}+2$ has two equal zeroes, find all the zeroes.
7. If $\alpha$ and $\beta$ are the zeroes of the $2 x 2-5 x+7$, then find a polynomial whose zeroes are $2 \alpha+3 \beta, 3 \alpha+2 \beta$
8. Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the coefficients.
9. $x^{2}-2 x-8$
10. $4 x^{2}-4 x+1$
11. Divide $2 x^{2}+3 x+1$ by $x+2$.
