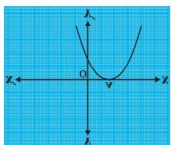
INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS

2. Polynomials

Nam_____ Date:_____ Class: X Sec: ___

1.	Find the value of k for which (-4) is a zero of the polynomial $x^2 - x - (2k + 2)$
2.	The number of zeroes of the polynomial from the graph is 
3.	If one of the zeroes of the quadratic polynomial $x^2 + 3x + k$ is 2, then find the value of k.
4.	A quadratic polynomial whose zeroes are -3 and 4 is_____.
5.	The relation ship between the zeroes and coefficients of the quadratic polynomial $ax^2 + bx + c$ is _____.
6.	Find a quadratic polynomial whose sum and product of zeroes are -3 and 2 respectively.
7.	If $\alpha \; and \; \beta$ are the zeroes of the polynomial f(x)= $x^2 + x + 1$,. Then find the value of $\frac{1}{\alpha} + \frac{1}{\beta}$.
8.	If one of the zeroes of the polynomial f(x)= $(k^2 + 4)x^2 + 13x + 4k$ is reciprocal of the other then find the value of k.
9.	The zeroes of a polynomial p(x) are precisely the x-coordinates of the points, where the graph of y=p(x) intersects the a) x-axis b) y-axis c) origin d)none of the above.
10.	A quadratic polynomial can have at most _____Zeroes.
11.	If $\alpha \; and \; \beta$ are the zeroes of the polynomial f(x)= $x^2 - p(x + 1) - c$, then $(\alpha + 1)(\beta + 1)$ =

	a) c-1 b) 1-c c) c d) 1+c
12.	Which of the following is a polynomial? $(a)x^2-5x+3$ $(b)\sqrt{x}+\frac{1}{\sqrt{x}}$ $(c)x^{3/2}-x+x^{1/2}$ $(d)x^{1/2}+x+10$
13.	Find a quadratic polynomial whose zeroes are $\frac{3}{5}$ and $\frac{-1}{2}$.
14.	Which are the zeroes of p(x)=$6x^2-7x-3$: a) $5,-2$ b) $-5,2$ c) $-5,-2$ d) none of these
15.	Find the zeroes of the quadratic polynomial x^2+5x+6 and verify the relationship between the zeroes and the coefficients.
16.	If the zeroes of the quadratic polynomial $x^2+(a+1)x+b$ are 2 and -3, then find the value of a and b.
17.	If $\alpha\ and\ \beta$ are the zeroes of the polynomial p(x)= $2x^2+5x+k$, satisfying the relation $\alpha^2+\beta^2+\alpha\beta=\frac{21}{4}$, then find the value of k.
18.	If $\alpha\ and\ \beta$ are the zeroes of the polynomial p(y)= $6y^2-7y+2$, find a quadratic polynomial whose zeros are $\frac{1}{\alpha}\ and\ \frac{1}{\beta}$.
19.	If the zeroes of the polynomial x^2+px+q are double in value to the zeroes of $2x^2-5x-3$, find the value of p and q.
20.	Find the zeroes of the quadratic polynomial $\sqrt{3}x^2-8x+4\sqrt{3}$.
21.	If one zero of the quadratic polynomial p(x)=$4x^2-8kx-9$ is negative of the other, find the value of k.
22.	If $\alpha\ and\ \beta$ are the zeroes of the polynomial ax^2+bx+c, then find the value of $\alpha^2+\beta^2$