



St. Xavier's Sr. Sec. School

Delhi-54

Class 9
14-5-2015

Formative Assessment I in MATHEMATICS
SECTION - A (1 x 4 = 4 marks)

Time : 1 hr.
M. Marks : 20

1. Find the zero of the polynomial $7x + 5$.
2. Write the abscissa of the following points:
a) $P(-3, 7)$ b) $Q(7, -5)$
3. Find the value of the polynomial $3x^3 + 5x^2 - 2x - 9$ if $x = 2$.
4. In which quadrant does the following points lie?
a) $(-8, 3)$ b) $(2, -1)$

SECTION – B (2 x 3 = 6 marks)

5. Using remainder theorem, find the remainder when $x^3 + 4x^2 - 3x + 10$ is divided by $x + 4$.
6. Without actually calculating the cube, find the value of $13^3 + (-18)^3 + 5^3$.
7. Find the value of a if $(x - a)$ is a factor of $x^5 - a^2x^3 + 2x + a + 1$.

SECTION – C (3 x 2 = 6 marks)

8. Factorise :
a) $\frac{1}{16}a^2 + \frac{1}{4}b^2 + 1 - \frac{1}{4}ab - b + \frac{1}{2}a$
b) $125a^3 + b^3 + 75a^2b + 15ab^2$
9. Draw a quadrilateral whose vertices are $(2, 2)$, $(-2, 2)$, $(-2, -2)$ and $(2, -2)$ on a graph paper and name the type of quadrilateral formed and find its area.

SECTION – D (4 x 1 = 4 marks)

10. Factorise the following polynomial using factor theorem
 $x^3 - 6x^2 + 11x - 6$.

-x-x-x-x-x-x-