



INDIAN SCHOOL DARSAIT

DEPARTMENT OF MATHEMATICS



Subject : Mathematics	Topic : Algebraic Equations(4)	Date of Worksheet : _____
Resource Person: Mrs Bhavya Vijelesh		Date : _____
Name of the Student : _____	Class & Division : VII _____	Roll Number : _____

S.No.	Section A(Basic Skills)	Marks
1	Write an algebraic expression for each of the following: (a) Suman is 7 years younger to his brother Aman. (b) Diameter of a circle is twice the radius. (c) Successor of a natural number n.	2
2	Find the solution for the equations: (a) $5m = 6$ (c) $n + 12 = 20$ (b) $p - 5 = 5$ (d) $\frac{a}{2} = 7$	1
Section B		
3	Write down the terms of the expression $-15x^3y + \frac{3}{5}x^2yz - 5xyz + \frac{1}{11}$	1
4	Find out the terms containing x and write the coefficient of x in the expression $16y^2 - 3xy + 6x + 11$	1
5	Group the like terms together from the following. (a) $cab^2, a^2bc, b^2ac, c^2ab, ab^2c, abc, acb^2$ (b) $xy^2, -x^2y, 2y^2x, 3yx^2$	1
6	Classify the following algebraic expressions as monomial, binomial, trinomial. (a) $15x^2y$ (c) $16x^3 + 3x^2 - 4x$ (b) $5xy - 11yx$ (d) $11x - 7 + 13x - 5$	1
7	Add: (a) $3x + 15y$, $-7x + 5y - 6$ and $-7y + 2x - 11$ (b) $-x^2 - xy - y^2$, $4y^2 + 2x^2 - 3xy$ and $7xy$	2
8	Subtract: (a) $110x - 45$ from $100 - x$ (b) $5x^2 + 7 + 6x - 5x^2$ from $3x^3 - 9x - x^2$	2

9	If $p = 3a - 2b + 4a^2$, $Q = 7a^2 - a - b$, $R = a + b$, find $P + Q - R$.	3
10	What should be taken away from $p^3 + 19pq - 7q^2$ to get $-6p^3 - 4pq$?	3
11	Subtract the sum of $5x^3 + 2x^2 - 5$ and $15x - x^3 - 2x^2$ from the sum of $9 + 7x - 3x^2$ and $4x - 7 - 2x^3$.	3
12	Evaluate the following algebraic expressions for $x = -1$ and $y = -2$. $2xy - 3xy + y$ (b) $11x - 3x + 4y - 1$	3
13	Simplify the expressions and then find the value if $x = 2$ and $y = -2$ $4(3x - 2) + 4x - 11$ (b) $6xy - 3(2xy - 4y)$	3
Section C(Hot Questions)		
14	Raghav adds $2x - 3 + 5y$ and $5y - 7x + 6$ and Pratap subtracts $3x - 7y + 4$ from $6x - 4y + 1$. Find the difference between their result	4
15	In a factory, there are a total of $5p^3 + 2p - 2$ employees. If $2p^2 + 3p - 5$ are females, how many male employees are there? Calculate the actual number of male employees if $p=2$.	4