



INDIAN SCHOOL DARSAIT

DEPARTMENT OF MATHEMATICS



Subject : Mathematics	Topic : Algebraic Expressions	Date of Worksheet :25/8/2019
Resource Person: Mrs Geetha Girish		Date : _____
Name of the Student : _____	Class & Division : _____	Roll Number : ____

S.No.	Section A(Basic Skills)	Marks
1	Subtraction of m from n	1
2	Identify the terms in the expression $2ab - 3a^2b + 12a$	1
3	Coefficient of x in $-9xy^2z$	1
	Section B	
4	Find the value of $2x^2 - 3x + 5$ when $x = -2$	2
5	Add a) $2ab - 3a + 6a^2; -3ab + 10a - 12a^2$ b) $-4lm + 5n; -lm + 5n; 9lm - 2n$	2
6	Subtract a) $3x^3 - 4xy + 5$ from $-6x^3 - 3xy - 7$ b) $-6a - 3b + c$ from $-2a + 3b + c$	2
7	What should be added to $7x^2 + 3xy + y^2$ to obtain $2x^2 - 3xy + 4y^2$	2
8	i) For $a=1, b=2$, find the value of $2(a+b)^2 - 9(a+b) - 5$ ii) Find the value $x^3 - y^3 - 6xy + 8$ for $x=-2, y=-1$	3
9	Simplify the expression and find its value when $a=5$ and $b=-3$ $2(a^3 + ab) + 3 - ab$	3
10	From the sum of $7x - 2y + 5z$ and $-3x + 4y - z$ subtract $9x - y + 3z$	3
11	The length of the side of a square is given as $3x + 5$. Find the expression which represents the perimeter of a square.	3
	Section C (Hot Questions)	
12	What expression must be added to $85x^3 - 27x^2 - 18x - 34$ that makes the sum zero?	3

13	Rohan's mother gave him Rupees $3xy^2$ and his father gave him Rupees $5(xy^2+2)$. Out of this total money he spent Rupees $(10 - 3xy^2)$ on his birthday party. How much money is left with him?	3
14	<p>Each symbol given below represents an algebraic expression.</p> <p>$\triangle = 3x^2 + 4y$, $\circ = 5x^2 + 4x$, $\square = 5y^2 - 3x^2 + 2x - 3y$</p> <p>The symbols are then represented in the expression:</p> <p>$\triangle + \circ - \square$</p> <p>Find the expression which is represented by the above symbols</p>	3