



# INDIAN SCHOOL DARSAIT

## DEPARTMENT OF MATHEMATICS



Subject : Mathematics	Topic : Algebraic Expressions and Identities(2)	Date of Worksheet : _____
Resource Person: MrsPriyaBijukumar	Date : _____	
Name of the Student : _____	Class & Division : VIII	Roll Number : ____

	Section A Give expressions for the following;	
1	The sum of 6 and x	
2	3 more than a number y	
3	7 is taken away from y	
4	Multiply x by 7	
5	3 taken away from 2y	
6	4 times the sum of x and y	
7	3 times x added to y	
<b>SECTION-B</b>		
1	Obtain the product of the following: (i) $-3xy^3, 2yx^3, 5xy$ (ii) $\frac{1}{8}a^2b^4, \frac{1}{4}ab, a^4b^2, 5$	2
2.	Find the following products: (i) $x^3y(x^2 + y^2 - z^2)$ (ii) $(2x^2 + 5y^2)(6x^2 - 15y^2)$ (iii) $(x - 5)(2x^3 - 5x^2 + 3x + 1)$	3
3	Simplify $a(2x - 3) + 4$ and find its value for $a = 1, x = -1$	3
4	Use a suitable identity to determine each of the following: (i) $(2x + 5y)(2x + 5y)$ (ii) $(3x - 4y)(3x - 4y)$ (iii) $(2x + \frac{3}{y})(2x - \frac{3}{y})$ (iv) $(2x + 5y)^2$ (v) $(x - 2y)^2$ (vi) $(p + 2q)^2$ (vii) $(x - 2)(x + 3)$	3
5	Find the following squares by using identities: (i) $(0.5x - 0.4y)^2$ (ii) $(x^2y - yz^2)^2$	3
6	Using identities evaluate: (i) $197 \times 203$ (ii) $48 \times 56$ (iii) $(1001)^2$	3
7	Simplify the following :	3



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	(i) $(4x + 7)^2 - (4x - 7)^2$ (ii) $(x-y)(x+y) + (y-z)(y+z) + (z-x)(z+x)$ . (iii) $(x + 3)(x - 3)(x^2 + 9)$ .	
	SECTION -C* (Hot questions)*	
8	If $x + \frac{1}{x} = 5$ , find the value of $x^2 + \frac{1}{x^2}$	
9	Simplify $\frac{-3}{2}a(2a - 3b + 4c) + \frac{9}{2}$ and find its value for $a = 1$ , $b = -1$ and $c = -2$ .	