



INDIAN SCHOOL AL WADI AL KABIR
Class VIII, Mathematics
ALGEBRAIC EXPRESSIONS & IDENTITIES
WORKSHEET-1

OBJECTIVE TYPE (1 Mark)

Q.1.	Which of the following is obtained by subtracting $x^2 - y^2$ from $y^2 - x^2$?			
	A	$-2(x^2 - y^2)$	B	$2(x^2 - y^2)$
			C	$-2(x^2 + y^2)$
			D	$2(x^2 + y^2)$
Q.2.	The value of $x^2 - 2yx + y^2$ when $x = 1$, $y = 2$ is			
	A	-1	B	1
			C	2
			D	-2
Q.3.	The area of a rectangle with length $2l^2m$ and breadth $3lm^2$ is			
	A	$4l^3m^3$	B	l^3m^3
			C	$2l^3m^3$
			D	$6l^3m^3$
Q.4.	The product of $2pq$, $-5pq^2$ and $-3p^2q$			
	A	$-30p^2q^3$	B	$-30p^3q^3$
			C	$30p^3q^3$
			D	$30p^2q^2$
Q.5.	The value of $64^2 - 36^2$			
	A	2800	B	2080
			C	2050
			D	2600
Q.6.	The value of $95 \times 103 =$			
	A	9600	B	9785
			C	9700
			D	9000
Q.7.	The product of $(2a + 3b)(6a - b)$			
	A	$12a^2 - 16ab + 3b^2$	B	$12a^2 + 16ab - 3b^2$
			C	$12a^2 + 16b + 3b^2$
			D	$12a - 16ab - 3b^2$
Q8.	If $96a = 88^2 - 56^2$, then the value of a is			
	A	42	B	46
			C	48
			D	56
Q9	The algebraic equation $4xy + 2yz + 5$ is a _____			
	A	Monomial	B	Binomial
			C	Trinomial
			D	Can't say
Q10	The volume of a rectangle with length, breadth and height as $5x$, $3x^2$ and $7x^4$ respectively is:			
	A	$105x^7$	B	$105x^2$
			C	$105x^4$
			D	$105x$

SECTION B

Fill in the blanks (1) marks)

Q11.	The coefficient of $-xy^2z$ is -----
Q12.	In a trinomial there are ----- terms.
Q13.	The like terms have same ----- factors
Q14.	The product of two monomials is always a -----
Q15	If $10x = 52^2 - 48^2$, then the value of x is -----
SECTION C(2 mark)	
Q16	Add: $5x^2y + 7xy - 2xy^2$ and $7x^2y - 6xy - xy^2$
Q17	Evaluate by identity: 103^2
Q18	Simplify and evaluate: $2(x - 2y + 1) - 3(x + y) + 7$ for $x = 2$ and $y = 1$
Q19	Multiply $(3ab^2 - 6ab + 13a)$ by $-2a^2b^2$
Q20	Subtract $x^5 + 5x^3y - 6x^2 + 8xy - 2$ from $-3x^5 - 2x^3y + 5x^2 - 7xy + 9$
SECTION D (3& 4 MARKS)	
Q21	Show that $(3p + q)^2 + (3p - q)^2 = 18p^2 + 2q^2$
Q22	Evaluate by using identity: (1) 104^2 (2) 103×97
Q23	Find the product : (1) $(x + 3)(x - 6)$ (2) $(m + 2n)^2$ (3) $(7x + 3y)(2x - 5y)$ (4) $(3p - 2q)(3p - 2q)$
Q24	Evaluate by using identity : (1) 102×98 (2) $77^2 - 23^2$ (3) 205×203
Q25.	Show that $(2x - 5)^2 + 40x = (2x + 5)^2$

ANSWERS

1.	A	2.	B	3.	D	4.	C	5.	A
6.	B	7.	B	8.	C	9.	C	10.	A
11.	-1	12.	3	13.	Algebraic	14.	Monomial	15.	40
16.	$12x^2y + xy - 3xy^2$	17.	1060 9	18.	4	19.	$-6a^3b^4 + 12a^3b^3 - 26a^3b^2$	20.	$-4x^5 - 7x^3y + 11x^2 - xy + 11$
21.	-	22.	1081 6 9991	23.	$x^2 - 3x - 9$ $m^2 + 4mn + 4n^2$ $14x^2 - 29xy - 15y^2$ $9p^2 - 4q^2$	24.	9996 5400 41615	25.	