INDIAN SCHOOL AL WADI AL KABIR
Class VII, Mathematics
WORKSHEET (2025-26)
ALGEBRAIC EXPRESSIONS

Multiple Choice Questions

Q.1.	The sum of -4x +2 and 2x -3							
	A	$-2x+11$	B	$-2x-1$	C	$2x-1$	D	$2x+1$
Q.2.	The value of a +ab – b if a =2 and b=-1							
	A	1	B	2	C	-1	D	3
Q.3.	The coefficient of m in the expression $2-m+n$ is							
	A	0	B	-1	C	+1	D	2
Q.4.	The perimeter of a triangle with sides 3x-7, 2x+5 and -x+11 is							
	A	$-2x-9$	B	2x +9	C	$-4x-9$	D	4x+9
Q.5.	On subtracting $-7x^2$ from $3x^2$, the result will be							
	A	$-10x^2$	B	$4x^2$	C	$10x^2$	D	$-4x^2$
Q.6.	The coefficient of the term containing y in the expression $3x^2$ +3x -9 y							
	A	3	B	-3	C	9	D	-9
Q.7.	2pq+ 3p -7q is							
	A	Binomial	B	Trinomial	C	Monomial	D	Can't say
Q.8.	Which of the following is the like term of $5m^2n$?							
	A	$-nm^2$	B	5mn	C	$2mn^2$	D	5m
Q.9	Factors of $-3x^2z^2y$ are							
	A	-3, x, x, y, y, z	B	-3,x,y,y,z,z	C	-3, x,x,y,,z,	D	3,x,y, z
Q.10.	The sum of the terms 6xy, -5xy, 8xy and -7xy							
	A	– 2xy	B	2xy	C	26xy	D	17xy

	LONG ANSWER QUESTIONS:
Q.11	Express term and factors by factor tree diagram: $3y^2 + 6xy - 2y + 1$
Q.12	Mohit has 5mn – 8m +n marbles. if m= -1 and n=-2, Find the number of marbles with Mohit
Q.13	Identify the monomial, binomial and trinomial among the following: a)a^2+b^2 +2ab b)24xyz c)$-yz -xy$
Q.14	Add $-2x^2 + 3xy - 2y$ and $5x^2 - 8xy + 7y$
Q.15	Find the value of 2pq +7p $-3q$ +5 if p= (-2) and q=3
Q.16	Simplify: $5m^2-3m-(-2m^2 + 3m)$
Q.17	Subtract $-2xy + 3x^2$ from the sum of 5xy $-5x^2$ and 3xy $-7x^2$
Q.18	Simplify combining the like terms: (I) p – (p – q) – q – (q – p) (II) $y^2 - 3y + y^2 - y - 4y^2$
Q.19	Find the value of p if the value of $3k^2 + 5k - 2p$ equals to 8, when k = -1.
Q.20.	**CASE STUDY** During Diwali, Maithili wants to decorate her room. She bought a wall hanging as shown in the figure. The triangular portion has two equal sides of length 4xy+3y each, and the third side measures 5xy−2y. The wall hanging also has a square portion with side length 5mn−3. Based on this information, answer the following questions.  1. Write the expression for the perimeter of the triangular portion. 2. Find the perimeter if x=5 and y = 3. 3. What is the side length of the square portion if m=2 and n =1? Hence find its area.

****

ANSWERS

Q1. C	Q2. A	Q3. B	Q4. D	Q5. A
Q6. D	Q7. B	Q8. A	Q9. A	Q10. B
Q11. -	Q12. 16	Q13. 1)Trinomial 2) Monomial 3) Binomial	Q14. $3x^2 - 5xy + 5y$	Q15. 12
Q16. $7m^2 - 6m$	Q17. $10xy - 15x^2$	Q18. 1) $2p - 2q$ 2) $-2y^2 - 4y$	Q19. P= (-5)	Q20. 1) 13x +4y 2) 57 cm 3) 7cm 4) 49cm^2