

SUBJECT: MATHEMATICS, CLASS: VII
CHAPTER: 6 (ALGEBRAIC EXPRESSIONS)

WORK SHEET (BASIC)

(1 Mark)

1. Which one of the following is a Monomial.

i) $4y$. ii) $3x+2$ iii) $2xz+y$. iv) $5x+6y$

2. $X+X+X+X=$ _____

i) 4. ii) $4X$ iii) $3X$. iv) none of these

3. A Binomial has _____ terms.

4. $Z \times 3Z =$ _____

5. Write any 2 examples of Monomial.

6. Write the coefficient in the expression, $3x$

7. Write the coefficients of $12xy$.

8. Which one of the following is not a binomial.

i) $4y$. ii) $3x+2$ iii) $2xz+y$. iv) $5x+6y$

9. $x+y+2x+y=$ _____.

10. What do you mean by binomial.

(2 marks)

11. Find the product, $4X \times 3Y \times 5$.

12. Find the product, $(3x+2)(5)$

13. $4.1X \times 3.4Y \times 5.6Z$ find the product.

14. Write the difference between monomial and binomial with examples?

15. What do you mean by degree of Polynomial? write the degree of $2x+y$.

16. Multiply the coefficients of the expression $4x+3y-2z$.

17. Add the coefficients of the expression, $-2x+3y-10$.

18. what do you mean by zero of a Polynomial.

19. Find the product of $4x \times 0 \times 24y$.

20. Write types of Polynomial.

(3mark)

21. Solve the following $(3x+7) \cdot (2y+1)$.

22. Find the product of $(1+x+y) \cdot (2x+y)$.

23. Solve and verify your answer with these values; $x=1, y=-2$

$(13x+7) \cdot (2y-1)$

24. Find the perimeter of the square field whose one side is $5z$ unit.

25. Write the HCF of following monomial, $24xz, 3x, 12yx$.

26. Factorise. $2x + 30yx$.

27. Find the area of the rectangle whose length is 4 times of its breadth, where breadth is $3a$ unit.

(4 marks)

28. Factorise the expression: $x + 3x + x^2$

19. Factorise the expression: $21x + 3xy + 6x^2$

20. Factorise the expression: $x^2 + ax + ab + b^2$

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SUBJECT: MATHEMATICS , CLASS: VII
CHAPTER: 6 (ALGEBRAIC EXPRESSIONS)
WORKSHEET (STANDARD)

(1 MARK)

1. What is the power of X in the product $X \times X$.

i) 4. ii) 2. iii) 3. iv) none of these

2. Which one of the following is a binomial?

i) $3x+5x$ ii) $(5x)(3y)$ iii) $5x+1$ iv) $x+2x+3x$

3. $Z \times (3+Z) =$ _____

4. Write the definition of Binomial with example.

5. $3x + 5xy + 7x^2$, write the coefficients in this expression.

6. Which one of the following is not a binomial.

i) $4y+3x^2$. ii) $3x+2x$ iii) $2xz+y$. iv) $5x+6$

7. $2.3x \times 1.1x \times 2.5x$, what is coefficient of the product.

ii) 4.325 ii) 6.325 iii) 3.325 iv) none of these

8. A monomial with power zero having _____ terms.

9. $Z \times (3+4Z) =$ _____

10. Write the definition of Polynomial with example.

(2 MARKS)

11. Find the product $(3x+2)(5+2x)$.

12. $3x + 5yz + 7x^2$, write the product of coefficients in this expression.

13. Find the product $(4.1X + 5.6Y)(1.2XY - 3Y)$ and write all the coefficients.

14. Find the product $(3x+2)(5+2xy+x)$ and write number of terms after multiplication.

(3MARKS)

15. Solve $(3x-7z)(2y-1)$ and verify your answer for $x=1, y=-2, z=2$.

16. Find the product $(1+x^2+y)(2x+z)$, and verify the answer for $x=1, y=3, z=-2$

17. Find the product and write the degree of the polynomial $(1+x+y)(2x+y)$

(4MARKS)

18. Factorise the expression: $x^2+ax+ab+bx-(a+x)$

19. Find the area of a triangle whose height is $6x$ unit & base is $14y$ unit.

20. Factorise the polynomial: $X^4 - 16$.

SUBJECT: MATHEMATICS , CLASS: VII
CHAPTER: 6 (ALGEBRAIC EXPRESSIONS)
WORKSHEET (ADVANCED)

(1 MARK)

1. Which one of the following is a binomial.

- i) $4y+3x^2$. ii) $3x+2x$ iii) $2xzxyz$. iv) $5\sqrt{x+6}$

2. One side of a square field is $(x+4)$ unit. Find the perimeter of the field.

- i) $4+x$ unit ii) $2(x+4)$ unit iii) 16 unit iv) none of these

3. A Polynomial with power zero having _____ terms.

4. The HCF of $3z$, $12zx$, $42xy$ is _____.

5. Write the definition of Polynomial with example, Give 2 examples that are not polynomials.

6., write the product of variables in the expression $3x+5yz+7x^2$

(2 MARKS)

7. The dimensions of a rectangular field are $(4.1X + 5.6Y)$, $(X+1.5Z)$ units. Find the area of that field.

8. Find the product, $(3x+12y^2)(5+2xy+x)$

(3 MARKS)

9. Solve and verify $(3x-7z) \cdot (2y-x-1)$ with these values, $x=0.1, y=-2.5, z=2$.

(4 MARKS)

10. Factorise the expression.

$$X^2 + aX + ab + bX - (a+X)(X+XY)$$
