

EduSahara™ Learning Center Assignment**Grade : Class VII, ICSE****Chapter : Algebraic Expressions****Name : Algebraic Expression Concepts****Licensed To : Teachers and Students for non-commercial use**

1. The degree of polynomial $(8vw + 8v - 10w + 1)$ is

(i) 1 (ii) 2 (iii) 4 (iv) 0 (v) 3

2. The degree of polynomial $(7mn^2 + 3mn - 2n + 6)$ is

(i) 4 (ii) 2 (iii) 1 (iv) 6 (v) 3

The degree of polynomial

3. $(2a^2c^2 + 8ac^2 + 3ac - 6b^2 + 5c^2)$ is

(i) 3 (ii) 1 (iii) 5 (iv) 7 (v) 4

The degree of polynomial

4. $(7j^3k^2l^3 - 9j^3k^2l + 8j^3l^3 - 6j^3l - 6j^2k^3 - 9k^2l^2 + 5kl^2)$ is

(i) 10 (ii) 6 (iii) 7 (iv) 8 (v) 9

5. The coefficient of term wx in polynomial $(-4wx + 14w - 3x - 5)$ is

(i) -5 (ii) -7 (iii) -4 (iv) -3 (v) -2

6. The coefficient of term ef^2 in polynomial $(ef^2 + 8f^2 - 9f + 7)$ is

(i) 4 (ii) 0 (iii) 2 (iv) 1 (v) -2

The coefficient of term ijk in polynomial

7. $(-5i^2jk + i^2k + 4ijk - 4ik^2 + 1)$ is

(i) 1 (ii) 4 (iii) 3 (iv) 5 (v) 7

The coefficient of term $x^3 z$ in polynomial

8.

$$(-x^3 y^2 z^3 - 8x^3 y z^3 - 3x^3 y + 8x^3 z - 6x^2 y^2 z^2 - 8x^2 y^2 - 4xz^3)$$
 is

- (i) 5 (ii) 7 (iii) 10 (iv) 8 (v) 9
-

9. Which of the following algebraic expressions is a monomial?

(i) $(x^2 y^3 z + 3xyz^2)$

(ii) $(2x^3 + 8xz^2 + 6y^2 z^2)$

(iii) $(-3x^3 yz^2 - 8xy^2 z^2 + 3y^3 z + 8y)$

(iv) $(-7x^2 y^3 - 3xy^3 + 6xy^2 z - 4xyz)$

(v) $4xy^3 z$

10. Which of the following algebraic expressions is a binomial?

(i) $(-8a^3 b^2 c^3 + 7a^3 c^2 + a^2 c - 5c)$

(ii) $6a^2 bc$

(iii) $(-3a^3 b^3 + 6a^3 b^2 c^2)$

(iv) $(9a^3 b^3 c + 8b^3 - 8b^2 c^3 - 7c^2)$

(v) $(-5a^2 c + 3ac^3 - 8b^2 c^2)$

11. Which of the following algebraic expressions is a trinomial?

(i) $(-6def)$

(ii) $(9d^2 e^2 f^2 + 7ef^2)$

(iii) $(2df + 4e^3 f^2 + 8e^3 + 2ef)$

(iv) $(-2d^3 f + 3d^2 f - 8e^2 + 5f)$

(v) $(3d + 5e^3 f^3 + 9f^3)$

12. Which of the following algebraic expressions is a constant polynomial?

- (i) $3r^3s^2t^3$
 - (ii) $(6r^3t^2 - 9rs^2)$
 - (iii) $(-9r^3s^3t + 6r^3t^2 - 7rs + 6rt^3)$
 - (iv) $(-6r^3t^2 - 2r^2s^3t^3 + 9r^2s^3t)$
 - (v) 3
-

13. Which of the following algebraic expressions is a zero polynomial?

- (i) $(9x^3y^2z^3 + 6x^2y^3z - 5x^2z^3 + 3xyz)$
 - (ii) 0
 - (iii) $(3x^2z + 8xy^3z^2)$
 - (iv) $(-3x^2y^3z^3)$
 - (v) $(4x^2y^3z^2 + 2x^2y^2z^3 + 2xz)$
-

14. The degree of the polynomial $(9f - 7)$ is

- (i) 2 (ii) 1 (iii) (-2) (iv) 3 (v) 0
-

15. The degree of the polynomial $(8z^2 - 3z - 2)$ is

- (i) 4 (ii) 3 (iii) (-1) (iv) 1 (v) 2
-

16. The degree of the polynomial $(b^4 - 3b + 1)$ is

- (i) 3 (ii) 5 (iii) 6 (iv) 1 (v) 4
-

17. The degree of the polynomial $(9k^5 + 7k^4 + 5k^2 - 7k + 2)$ is

- (i) 6 (ii) 3 (iii) 5 (iv) 4 (v) 8
-

18. The coefficient of term s in polynomial $(9s - 4)$ is

- (i) 8 (ii) 12 (iii) 9 (iv) 10 (v) 7
-

19. The constant term in polynomial $(3t^2 - 7t + 9)$ is

- (i) 9 (ii) 8 (iii) 10 (iv) 11 (v) 6
-

20. The coefficient of term g^3 in polynomial $(4g^3 - 4g^2 + 9g + 3)$ is

- (i) 7 (ii) 3 (iii) 5 (iv) 2 (v) 4
-

21. The coefficient of term v^3 in polynomial $(3v^4 + 3v^3 - 4v^2 - 5v + 4)$ is

- (i) 3 (ii) 5 (iii) 4 (iv) 2 (v) 1
-

22. Which of the following algebraic expressions is a monomial?

- (i) $2y^2$
- (ii) $(-4y^3 + 3)$
- (iii) $(-3y^3 - 7y^2 + 9y)$
- (iv) $(-8y^4 - 2y^3 - y^2 - 5y - 7)$
- (v) $(9y^4 + 9y^3 + 3y^2 + 2y + 3)$
-

23. Which of the following algebraic expressions is a binomial?

- (i) $(-4s^4 - 7s^3 + 5s^2 + s - 3)$
- (ii) $(-9s^4 + 7s^3 + 3s^2 - 8s - 7)$
- (iii) $(-5s^3 - 7s)$
- (iv) $(3s^4 + 8s^2 + 6s)$
- (v) $(-s)$
-

24. Which of the following algebraic expressions is a trinomial?

(i) $(-6q^4 - q^3 + 7q^2 - 7q - 6)$

(ii) $7q^4$

(iii) $(-4q^2 + 1)$

(iv) $(8q^4 + 2q^3 + 5q^2 + 6q - 2)$

(v) $(-8q^3 + 7q^2 + 5)$

25. Which of the following algebraic expressions is a constant polynomial?

(i) $(7p^3 - 5p^2 - 6)$

(ii) $(5p^2 - 8p)$

(iii) $(-8p^3)$

(iv) 8

(v) $(-7p^4 + 8p^3 + 2p^2 - 5p + 5)$

26. Which of the following algebraic expressions is a zero polynomial?

(i) 0

(ii) $(-k^3)$

(iii) $(3k^3 - 7k^2 - 5)$

(iv) $(2k^4 - 8k^3 + 7k^2 + 8k + 1)$

(v) $(-k^2 - 4)$

27. Which of the following are polynomials?

a) $\frac{(x + y)}{(x - y)}$

b) $(x + y)$

c) $x + \frac{1}{x}$

d) x^2

e) $x^2 + \frac{1}{x^2}$

(i) {a,b} (ii) {c,d,b} (iii) {b,d} (iv) {c,d} (v) {e,a,b}

28. Which of the following are not polynomials?

a) $100x^2$

b) $x + \frac{1}{x}$

c) $(15x^2 + 39xy - 84y^2)$

d) $(3x + 12y)$

e) $\frac{(3x + 12y)}{(5x - 7y)}$

(i) {b,e} (ii) {c,e} (iii) {c,e,b} (iv) {a,b} (v) {d,a,b}

29. Which of the following are not polynomials?

a) $\sqrt{x}$

b) $(4x - 8y)$

c) $(8x + 12y)$

d) $9x^2$

e) $9x^2 + \frac{1}{9x^2}$

(i) {c,e,a} (ii) {c,e} (iii) {d,b,a} (iv) {b,a} (v) {a,e}

30. Which of the following are not polynomials?

a) $16x^2$

b) $(9x - 4y)$

c) $(90x^2 + 41xy - 36y^2)$

d)
$$\frac{(10x + 9y)}{(9x - 4y)}$$

e) $\sqrt{x}$

(i) {c,a,d} (ii) {d,e} (iii) {b,e,d} (iv) {b,e} (v) {a,d}

31. Which of the following is a factor of $49x^5y^4z$?

(i) x^6yz (ii) x^5y^5z (iii) x^5yz^2 (iv) x^5yz

32. Which of the following is not a factor of $34x^2y^4z^4$?

(i) xy^2z^2 (ii) $x^2y^5z^5$ (iii) $x^2y^3z^4$ (iv) $x^2y^4z^3$ (v) xy^4z^4

33. Which of the following is a factor of $(4x + yz^4)$?

(i) no factors (ii) yz^4 (iii) $4y$ (iv) $4xz^2$ (v) $4x$

34. Which of the following is an irreducible factor of $8x^4yz^4$?

(i) x (ii) x^3y (iii) y^2z (iv) xz^2 (v) $x^3y^2z^2$

Assignment Key

- 1) (ii)
- 2) (v)
- 3) (v)
- 4) (iv)
- 5) (iii)
- 6) (iv)
- 7) (ii)
- 8) (iv)
- 9) (v)
- 10) (iii)
- 11) (v)
- 12) (v)
- 13) (ii)
- 14) (ii)
- 15) (v)
- 16) (v)
- 17) (iii)
- 18) (iii)
- 19) (i)
- 20) (v)
- 21) (i)
- 22) (i)
- 23) (iii)
- 24) (v)
- 25) (iv)
- 26) (i)
- 27) (iii)
- 28) (i)
- 29) (v)
- 30) (ii)
- 31) (iv)
- 32) (ii)
- 33) (i)
- 34) (i)