

EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE
Chapter : Fundamental Concepts
Name : Algebraic Expression Concepts
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1. The degree of the polynomial $(-4p + 3)$ is

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

2. The degree of the polynomial $(-5h^2 + 6h - 9)$ is

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

3. The degree of the polynomial $(4h^3 + 4h^2 + 5)$ is

(i) 4 (ii) 0 (iii) 2 (iv) 3 (v) 6

4. The degree of the polynomial $(-9a^5 + 9a^4 + 5a^3 + 6a + 1)$ is

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

5. The constant term in polynomial $(6i - 4)$ is

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

6. The coefficient of term h in polynomial $(3h^2 + 4h + 8)$ is

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

7. The coefficient of term h^2 in polynomial $(-4h^3 + 2h^2 + 8h + 9)$ is

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

8. The coefficient of term b^4 in polynomial $(2b^4 - 8b^3 - 8b^2 + 7b - 7)$ is

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

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

(i) e^3

(ii) $(-7e^2 - 6)$

(iii) $(2e^4 + 5e^3 + 5e^2 - 9e + 8)$

(iv) $(-e^4 + 6e^2 + 2)$

(v) $(-8e^4 + 2e^3 + e^2 + 4e + 1)$

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

(i) $(-j^4 - 7j^3)$

(ii) $(-5j^4 + 3j^3 - 6j^2 + 5j + 2)$

(iii) $(-9j^4)$

(iv) $(4j^4 - 9j^3 - 6j^2 + 6j + 6)$

(v) $(6j^3 + 2j^2 - 5)$

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

(i) $5e^3$

(ii) $(6e^3 + 5)$

(iii) $(2e^4 + 8e^3 - 2e^2 + 2e + 6)$

(iv) $(-6e^4 + 2e^3 - 2e^2)$

(v) $(-9e^4 + 9e^3 - e^2 + 8e + 6)$

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

(i) $(3f^2 + 9)$

(ii) $(-6f^2)$

(iii) 9

(iv) $(-8f^3 + 7f^2 + 3)$

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

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

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

(ii) $(9v^2 - 7v + 6)$

(iii) 0

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

(v) $6v^4$

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

(i) $(r^3 - 2r^2 - 3r - 3)$

(ii) $(-2r^2 - 8r + 1)$

(iii) $(7r^5 - r^4 - 3r^2 - 7r + 9)$

(iv) 6

(v) $(6r - 4)$

15. Which of the following algebraic expressions is a linear polynomial?

(i) $(-3y^5 - 5y^4 + 3y^3 - 5y - 7)$

(ii) $(-3y^3 - 3y^2 + 6y - 2)$

(iii) $(-7y^2 + 5y + 5)$

(iv) $(-7y - 6)$

(v) 1

16. Which of the following algebraic expressions is a quadratic polynomial?

(i) $(3i^4 + 3i^3 - 4i^2 + 3i - 1)$

(ii) $(-6i + 6)$

(iii) 4

(iv) $(-4i^3 - 9i^2 + 2i + 5)$

(v) $(-i^2 - 7i - 3)$

17. Which of the following algebraic expressions is a cubic polynomial?

(i) $(-5x^3 + 3x^2 - 2x + 5)$

(ii) $(-x^5 + x^4 + 4x^2 + 6x - 5)$

(iii) 7

(iv) $(-6x^2 + 6x + 1)$

(v) $(3x + 7)$

18. The degree of polynomial $(-13ij + 8i - 9j - 1)$ is

(i) 3 (ii) 2 (iii) 0 (iv) 1 (v) 5

19. The degree of polynomial $(-9o^2p^2 + 8op + o + 5p)$ is

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

The degree of polynomial

20. $(3o^2pq^2 + 7o^2q^2 - 2opq^2 - 7p + 4q)$ is

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

The degree of polynomial

21. $(9u^3v^3 - 5u^3v + 6u^3w^3 + 3u^2v^2w^2 + 6u^2v^2 - 9uv^2w - 3v^3w^3)$ is

(i) 7 (ii) 9 (iii) 5 (iv) 6 (v) 4

22. The coefficient of term c in polynomial $(14cd + 10c + 7d + 1)$ is

- (i) 10 (ii) 12 (iii) 11 (iv) 9 (v) 7
-

23. The coefficient of term s^2 in polynomial $(2r^2s^2 - rs^2 - 8r + 4s^2)$ is

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

The coefficient of term a^2c in polynomial
24.
 $(7a^2c - 8ab^2c^2 + 4abc - 3ac^2 + 5bc^2)$ is

- (i) 6 (ii) 8 (iii) 10 (iv) 4 (v) 7
-

The coefficient of term tv^2 in polynomial
25.
 $(-7t^3u^3v^2 - 9t^2u^3v^3 - 3t^2uv^3 + 6t^2uv^2 - tv^2 - 3u^2v^3 - 5v)$ is

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

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

- (i) $(3c^2d^3e^2 - 2c^2d^2 - 9d^3e^2)$
(ii) $(-5c^3d^2e^3 - 4c^3de^3)$
(iii) $(2c^3d^3e^3 - 7c^3 - 9c^2d + 5c^2)$
(iv) $(4c^3de^2 - 6c^3de - 7cd^3e + 3cd^2e^2)$
(v) $(-3cd^2e^3)$
-

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

- (i) $(-6k^2l^2 - 4l^2)$
(ii) $(5j^3l^3 + 2j^2l^2 + jk + 9kl)$
(iii) $(4j^3kl^3 + 8j^3l^2 - j^2k^2l^2 + 4jkl^3)$

$$(iv) \ (7j^3k^2l^2 + 4j^2l^3 + 5k)$$

$$(v) \ 9j^2k^2l$$

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

$$(i) \ (6n^2o^2p^3 + 6n^2op^2 - 6n)$$

$$(ii) \ 2nop$$

$$(iii) \ (9op^3 - 9op)$$

$$(iv) \ (9n^2p^3 - 7no^2p + 9o^3p^3 + 2o^3p)$$

$$(v) \ (5n^3o^3 - 2nop + 7o^3 - 7op)$$

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

$$(i) \ (-4j^3k^2l^3 - 5j^3l^3 + 4jk^2l^3 - 3k^3l)$$

$$(ii) \ (2jk^3l - 9jl^2)$$

$$(iii) \ (-4jk^3l^2)$$

$$(iv) \ (-7j^2l^2 - 3jkl^2 - 9jkl)$$

$$(v) \ (-1)$$

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

$$(i) \ (-4c^3e^2 - 2c^3 + 2cd^3e - 8d^3e)$$

$$(ii) \ (c^3de^3 + 6c^2d^2e^3 - e^2)$$

$$(iii) \ (2c^3d^3e^3 - 3c^3d^2e^2)$$

$$(iv) \ 7c^3d^2e^3$$

$$(v) \ 0$$

31. Which of the following are polynomials?

a) $(x + y)$

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

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

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

e) x^2

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

32. Which of the following are not polynomials?

a) $(108x^2 + 15xy - 25y^2)$

b) $4x^2$

c) $\frac{(9x + 5y)}{(12x - 5y)}$

d) $(9x + 5y)$

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

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

33. Which of the following are not polynomials?

a) $49x^2$

b) $49x^2 + \frac{1}{49x^2}$

c) $(10x + 11y)$

d) $(12x - 9y)$

e) $\sqrt{x}$

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

34. Which of the following are not polynomials?

a) $(132x^2 - 55xy - 77y^2)$

b) $\sqrt{x}$

c) $121x^2$

d) $\frac{(12x + 7y)}{(11x - 11y)}$

e) $(11x - 11y)$

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

Assignment Key

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