EduSahara™ Assignment

Name : Polynomial Concepts

Chapter : Polynomials and Factorisation

Grade : SSC Grade IX

1. Which of the following are polynomials?

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

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

   c) $(x+y)$

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

   e) x^2

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

2. Which of the following are not polynomials?

   a) $(2x+6y)$

   b) x^2

   c) $\frac{(2x+6y)}{(11x-12y)}$

   d) $(22x^2+42xy-72y^2)$

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

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

3. Which of the following are not polynomials?

   a) $(5x-4y)$

   b) $\sqrt{x}$

   c) $16x^2+\frac{1}{16x^2}$

   d) $(5x+9y)$

   e) $16x^2$

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

4. Which of the following are not polynomials?

a) $(6x-7y)$

b) $81x^2$

c) $\sqrt{x}$

d) $(66x^2-17xy-70y^2)$

e) $\frac{(11x+10y)}{(6x-7y)}$

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

5. Which of the following are polynomials?

a) $(x+y)$

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

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

d) x^2

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

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

6. Which of the following are not polynomials?

a) $\frac{(12x+11y)}{(2x-6y)}$

b) $(24x^2-50xy-66y^2)$

c) $49x^2$

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

e) $(12x+11y)$

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

7. Which of the following are not polynomials?

a) $(8x+8y)$

b) $\sqrt{x}$

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

d) $49x^2$

e) $(6x-y)$

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

8. Which of the following are not polynomials?

a) $\frac{(8x+4y)}{(7x-12y)}$

b) $(7x-12y)$

c) $4x^2$

d) $(56x^2-68xy-48y^2)$

e) √x

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

9. The degree of the polynomial $(-6v+5)$ is

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

10. The degree of the polynomial $(-8d^2-2d+5)$ is

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

11. The degree of the polynomial $(-8j^3+5j^2+7j)$ is

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

12. The degree of the polynomial $(-3k^5-9k^4-k^3+3k^2+3)$ is

(i) 3 (ii) 4 (iii) 5 (iv) 7 (v) 6

13. The constant term in polynomial $(3m+3)$ is

(i) 0 (ii) 4 (iii) 3 (iv) 2 (v) 5

14. The constant term in polynomial $(4v^2-6v-8)$ is

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

15. The constant term in polynomial $(-9w^3-5w^2+8w+3)$ is

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

16. The coefficient of term r^3 in polynomial $(4r^4+4r^3-7r^2-r+1)$ is

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

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

(i) $(-3p^4+2p^2-p)$ (ii) $(-9p^2)$ (iii) (p^4+4p) (iv) $(3p^4-4p^3+2p^2+7p-1)$

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

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

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

(v) $2a$

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

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

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

(i) 5 (ii) $(-3u^4+u^3+5u^2-u+4)$ (iii) $3u^2$ (iv) $(2u^3+8u^2)$ (v) $(9u^2+8u+1)$

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

(i) 0 (ii) $(-7a^2+7a)$ (iii) $(-a^4-5a^3-4a^2+4a-8)$ (iv) $(-8a^4-3a^2-1)$ (v) $(-5a^2)$

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

(i) $(6w^2+7w-8)$ (ii) 2 (iii) $(-3w^3-3w^2+9w-7)$ (iv) $(-w^5+7w^4+4w^3+8w^2-8w)$ (v) $(-8w+1)$

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

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

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

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

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

(i) 1 (ii) $(-6t^3+7t^2-6t-8)$ (iii) $(-5t^2-5t-2)$ (iv) $(6t^4+5t^3+t^2-4t-8)$ (v) $(-7t+9)$

26. The degree of polynomial $(6xy+4x+4y+13)$ is

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

27. The degree of polynomial $(2op-2p^2+2p+2)$ is

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

28. The degree of polynomial $(-5e^2f^2g-6e^2g-2efg^2-3eg^2-9f^2g^2)$ is

(i) 4 (ii) 5 (iii) 7 (iv) 6 (v) 3

29. The degree of polynomial $(-9t^3v^3-9t^2uv-t^2v^3+3tu^3v^3+tuv^2-uv^2+4)$ is

(i) 10 (ii) 6 (iii) 7 (iv) 8 (v) 5

30. The coefficient of term y in polynomial $(-16xy-3x-8y-1)$ is

(i) -9 (ii) -7 (iii) -11 (iv) -5 (v) -8

31. The coefficient of term o^2p in polynomial $(-2o^2p^2-8o^2p+5op-5o)$ is

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

32. The coefficient of term f^2 in polynomial $(8f^2-4fg^2h+3fh^2+5g^2h^2+9h^2)$ is

(i) 8 (ii) 9 (iii) 11 (iv) 7 (v) 6

33. The coefficient of term $e^2 f$ in polynomial $(8d^2e^2f^3 + def^3 - 3e^3f + 4e^2f - 9e^2 + 2f^3 - f)$ is

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

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

(i) $(-5i^3jk - 7ij^2k + 4j^3 + 9jk)$ (ii) $(6i^3j^3k^2 + 6i^2j^3k + i^2j)$ (iii) $(-8i^3j^2k^2 - 9)$

(iv) $(-i^2jk + 7i^2 - 9ijk^3 + 3j^3k^3)$ (v) $(-8ijk^3)$

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

(i) $(5kl^2m^3 + 3l)$ (ii) $(-4k^3lm + 8k^3 + 7k^2lm^3 + 8kl^2m^2)$ (iii) $(-6k^3l^2m - k^3m^3 - 3k^2l^3m + 8l^2)$

(iv) $(4k^3m^2 - 4k^2l^2m^3 + 2k^2lm^3)$ (v) $8k^3l^3m^2$

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

(i) $(2a^3b^3c + 9a^3c^3 + 2b^3c - 7bc^3)$ (ii) $(4a^3bc^2 - 9a^2b^2c^3 - 1)$ (iii) $(7ab^2c^3 + 3b^2c^2)$

(iv) $(8a^2b^2c - 2a^2b - 6ac^3 + 9ac^2)$ (v) $(-2abc)$

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

(i) $(-5o^3p^2q^2 + 9o^3pq^3 - 6o^3pq^2 - 6o^3q^2)$ (ii) 1 (iii) $(-o^2p^2q^3 + 7oq^3 + 9q^3)$ (iv) $3o^3pq^2$

(v) $(3o^3p^2q^3 - 3o^2p^3q)$

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

(i) $(-8a^3b^3c^3 - 5ab^2c^2)$ (ii) $(7a^3b - 6ab^2 - 7abc^2)$ (iii) 0 (iv) $(-7a^2bc)$

(v) $(-2ab^2c - 6b^3c^2 + 8b^2c^3 + 6c^3)$

39. Which of the following are true?

a) A binomial may have degree 3
b) Every polynomial is a binomial
c) πr^2 is a monomial
d) Degree of zero polynomial is zero
e) A binomial has two and only two terms

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

Assignment Key

1) (iii)	2) (iii)	3) (ii)	4) (ii)	5) (i)	6) (iii)
7) (iv)	8) (v)	9) (iv)	10) (ii)	11) (iii)	12) (iii)
13) (iii)	14) (v)	15) (ii)	16) (i)	17) (ii)	18) (iii)
19) (iii)	20) (i)	21) (i)	22) (ii)	23) (iv)	24) (iii)
25) (ii)	26) (i)	27) (ii)	28) (ii)	29) (iii)	30) (v)
31) (v)	32) (i)	33) (ii)	34) (v)	35) (i)	36) (ii)
37) (ii)	38) (iii)	39) (v)			