EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Algebraic Expressions

Grade : ICSE Grade VII

1. The coefficient of term j^3l^2 in polynomial $(8j^3k^2l^2+6j^3kl-5j^3l^2+9j^2+7jk+8k^3l+4k^2l)$ is

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

2. The value of $(-5ij+2j)\times(3ij+5i)\times(8ij+8j)$ is

   (i) $(-119i^3j^3-200i^3j^2-72i^2j^3-120i^2j^2+48ij^3+80ij^2)$

   (ii) $(-120i^3j^3-203i^3j^2-72i^2j^3-120i^2j^2+48ij^3+80ij^2)$

   (iii) $(-120i^3j^3-197i^3j^2-72i^2j^3-120i^2j^2+48ij^3+80ij^2)$

   (iv) $(-120i^3j^3-200i^3j^2-72i^2j^3-120i^2j^2+48ij^3+80ij^2)$

   (v) $(-121i^3j^3-200i^3j^2-72i^2j^3-120i^2j^2+48ij^3+80ij^2)$

3. The value of $\frac{1}{2}tu\times\frac{1}{5}$ is

   (i) $\frac{1}{8}tu$ (ii) $\frac{1}{12}tu$ (iii) $(-\frac{1}{10}tu)$ (iv) $\frac{1}{10}tu$ (v) $\frac{3}{10}tu$

4. The value of $(3t^2+7t-7)-(-t^2+3t+5)$ is

   (i) $(5t^2+4t-12)$ (ii) $(3t^2+4t-12)$ (iii) $(4t^2+4t-12)$ (iv) $(2t^2+4t-12)$ (v) $(6t^2+4t-12)$

5. Which of the following terms can be added to $4gf^2h^2$?

   (i) $(-3f^2gh^2)$ (ii) $(-5fg^2h^2)$ (iii) $(-9f^2gh)$ (iv) $(-9f^2g^2h^2)$ (v) $8fgh$

6. Which of the following are polynomials?

   a) $(x+y)$

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

   c) x^2

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

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

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

7. The value of $\frac{2}{5}ef+\frac{1}{2}ef$ is

(i) $\frac{3}{4}ef$ (ii) $\frac{7}{10}ef$ (iii) $\frac{11}{10}ef$ (iv) $\frac{9}{10}ef$ (v) $\frac{9}{8}ef$

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

(i) $(-2j^3+7j^2l^2+l^3)$ (ii) $(-j^2kl-6j^2k+4jk^3l^2+6jk^2l^3)$ (iii) $(-8j^2kl)$ (iv) $(-j^3k^2l-j^2k+7jk^3l-j)$

(v) $(9j^3k^3-2jl^3)$

9. $(2x^4+5x^3+2x^2)\div(x^2+2x)$

(i) $(2x^2+2x)$ (ii) (x^2+x) (iii) $(2x^2-x)$ (iv) $(2x^2+x)$ (v) $(-2x^2+x)$

10. The value of $(2x+7yz+2y)-(3xz-yz+2y)$ is

(i) $(-3xz+4x+8yz)$ (ii) $(-2xz+2x+8yz)$ (iii) $(-4xz+2x+8yz)$ (iv) $(-3xz+2x+8yz)$

(v) $(-3xz-x+8yz)$

11. The remainder when $(9t^2+5t+6)$ is divided by $(t-9)$ is

(i) 779 (ii) 781 (iii) 780 (iv) 778 (v) 782

12. The quotient when q^2 is divided by $(q+7)$ is

(i) $(2q-7)$ (ii) $(3q-7)$ (iii) $(q-7)$ (iv) $(-q-7)$ (v) (-7)

13. The quotient when $(-9n-5)$ is divided by $(n+3)$ is

(i) (-7) (ii) (-8) (iii) (-10) (iv) (-11) (v) (-9)

14. The degree of the polynomial $(-7u^4+6u^3-8u)$ is

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

15. The sum of the terms $(-2), 6, (-4e), 5e, (-5)$ is

(i) (-1) (ii) $(2e-1)$ (iii) $(e+1)$ (iv) $(e-3)$ (v) $(e-1)$

16. The coefficient of term ef in polynomial $(7e^2f+5ef+6e+4f)$ is

(i) 6 (ii) 4 (iii) 5 (iv) 7 (v) 2

17. The value of $1\times(-4)$ is

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

18. The value of $(-2q^3)-(-6q^3)$ is

(i) $5q^3$ (ii) $4q^3$ (iii) q^3 (iv) $3q^3$ (v) $6q^3$

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

(i) $(8d^3e^2+4d^3-1)$ (ii) $5d^3e^2f$ (iii) $(-5d^3f+8def-3e^2f^3-7ef^3)$ (iv) $(7d^3ef-d^2e^3f^3)$

(v) $(7d^3e^3f^2-8d^3e^3+9d^2e^3f+3d^2e^2f^3)$

20. The value of $4q+4q$ is

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

21. The sum of the expressions $(5p+4),(5p-7),(-8q-7),(4p+q),(-8pq-5q)$ is

(i) $(-9pq+14p-12q-10)$ (ii) $(-8pq+17p-12q-10)$ (iii) $(-8pq+11p-12q-10)$

(iv) $(-7pq+14p-12q-10)$ (v) $(-8pq+14p-12q-10)$

22. The value of $(2b^2c+4bc+6b-7c)-(-9b^2c-7b^2-2bc-b)$ is

(i) $(10b^2c+7b^2+6bc+7b-7c)$ (ii) $(11b^2c+9b^2+6bc+7b-7c)$ (iii) $(11b^2c+4b^2+6bc+7b-7c)$

(iv) $(11b^2c+7b^2+6bc+7b-7c)$ (v) $(12b^2c+7b^2+6bc+7b-7c)$

23. The remainder when $(-5c^4+c^3+c^2-6c)$ is divided by $(c^2-7c+10)$ is

(i) $(-975c+1870)$ (ii) $(-978c+1870)$ (iii) $(-974c+1870)$ (iv) $(-972c+1870)$ (v) $(-976c+1870)$

24. The value of $\frac{3}{5}bc(\frac{2}{3}b^2d^2+\frac{1}{5}bc+\frac{3}{4}d^2)$ is

(i) $(\frac{2}{3}b^3cd^2+\frac{3}{25}b^2c^2+\frac{9}{20}bcd^2)$ (ii) $(\frac{2}{7}b^3cd^2+\frac{3}{25}b^2c^2+\frac{9}{20}bcd^2)$ (iii) $(\frac{2}{5}b^3cd^2+\frac{3}{25}b^2c^2+\frac{9}{20}bcd^2)$

(iv) $(\frac{2}{5}b^3cd^2+\frac{1}{5}b^2c^2+\frac{9}{20}bcd^2)$ (v) $(\frac{2}{5}b^3cd^2+\frac{1}{25}b^2c^2+\frac{9}{20}bcd^2)$

25. Which of the following are not polynomials?

a) $36x^2$

b) $(11x-9y)$

c) $(22x^2+92xy-90y^2)$

d) √x

e) $\frac{(2x+10y)}{(11x-9y)}$

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

Assignment Key

1) (iv)	2) (iv)	3) (iv)	4) (iii)	5) (i)	6) (v)
7) (iv)	8) (iii)	9) (iv)	10) (iv)	11) (iii)	12) (iii)
13) (v)	14) (iii)	15) (v)	16) (iii)	17) (i)	18) (ii)
19) (iv)	20) (i)	21) (v)	22) (iv)	23) (i)	24) (iii)
25) (i)					