EduSahara™ Assignment

Name : Multiplication of Algebraic Expressions

Chapter : Algebraic Expressions

Grade : ICSE Grade VII

1. The product of the terms $(-q), 2qr, (-q), (-2), (-5)$ is

   (i) $20q^3r$ (ii) $21q^3r$ (iii) $18q^3r$ (iv) $19q^3r$ (v) $22q^3r$

2. The product of the terms $3p, (-4p), (-p), (-1), 5$ is

   (i) $(-61p^3)$ (ii) $(-59p^3)$ (iii) $(-62p^3)$ (iv) $(-60p^3)$ (v) $(-57p^3)$

3. The product of the terms $2, (-2), 5, (-1), (-5)$ is

   (i) (-103) (ii) (-99) (iii) (-101) (iv) (-100) (v) (-98)

4. The value of $7uv \times 1$ is

   (i) $9uv$ (ii) $7uv$ (iii) $6uv$ (iv) $4uv$ (v) $8uv$

5. The value of $wx \times (-9) \times (-6x) \times 7$ is

   (i) $378wx^2$ (ii) $379wx^2$ (iii) $376wx^2$ (iv) $380wx^2$ (v) $377wx^2$

6. The value of $(-8ghi^2) \times 6g^2h^2i$ is

   (i) $(-49g^3h^3i^3)$ (ii) $(-51g^3h^3i^3)$ (iii) $(-45g^3h^3i^3)$ (iv) $(-47g^3h^3i^3)$ (v) $(-48g^3h^3i^3)$

7. The value of $2ce \times cde \times cde \times 5de$ is

   (i) $9c^3d^3e^4$ (ii) $11c^3d^3e^4$ (iii) $13c^3d^3e^4$ (iv) $10c^3d^3e^4$ (v) $7c^3d^3e^4$

8. The value of $5(-2w-1)$ is

   (i) $(-11w-5)$ (ii) $(-10w-7)$ (iii) $(-10w-2)$ (iv) $(-9w-5)$ (v) $(-10w-5)$

9. The value of $(-rs)(-r^2+3rs)$ is

   (i) $(r^3s-5r^2s^2)$ (ii) $(r^3s-3r^2s^2)$ (iii) $(2r^3s-3r^2s^2)$ (iv) $(r^3s-r^2s^2)$ (v) $(-3r^2s^2)$

10. The value of $3a(2ab+2a)$ is

    (i) $(6a^2b+6a^2)$ (ii) $(7a^2b+6a^2)$ (iii) $(6a^2b+8a^2)$ (iv) $(5a^2b+6a^2)$ (v) $(6a^2b+4a^2)$

11. The value of $(-3)(2r^2s^2t^2+4rs+3)$ is

    (i) $(-7r^2s^2t^2-12rs-9)$ (ii) $(-5r^2s^2t^2-12rs-9)$ (iii) $(-6r^2s^2t^2-15rs-9)$ (iv) $(-6r^2s^2t^2-12rs-9)$

    (v) $(-6r^2s^2t^2-9rs-9)$

12. The value of $\frac{1}{2}(\frac{1}{4}g+\frac{1}{3})$ is

(i) $(\frac{1}{6}g+\frac{1}{6})$ (ii) $(\frac{1}{10}g+\frac{1}{6})$ (iii) $(\frac{1}{8}g+\frac{1}{2})$ (iv) $(\frac{1}{8}g-\frac{1}{6})$ (v) $(\frac{1}{8}g+\frac{1}{6})$

13. The value of $\frac{1}{2}l(\frac{2}{5}k^2l+\frac{3}{4}kl)$ is

(i) $(\frac{1}{3}k^2l^2+\frac{3}{8}kl^2)$ (ii) $(\frac{1}{5}k^2l^2+\frac{5}{8}kl^2)$ (iii) $(\frac{1}{5}k^2l^2+\frac{1}{8}kl^2)$ (iv) $(\frac{1}{7}k^2l^2+\frac{3}{8}kl^2)$ (v) $(\frac{1}{5}k^2l^2+\frac{3}{8}kl^2)$

14. The value of $\frac{3}{4}(\frac{1}{4}v^2w^2+\frac{1}{2}vw^2x^2)$ is

(i) $(\frac{3}{16}v^2w^2+\frac{1}{8}vw^2x^2)$ (ii) $(\frac{3}{14}v^2w^2+\frac{3}{8}vw^2x^2)$ (iii) $(\frac{3}{16}v^2w^2+\frac{5}{8}vw^2x^2)$ (iv) $(\frac{3}{16}v^2w^2+\frac{3}{8}vw^2x^2)$

(v) $(\frac{1}{6}v^2w^2+\frac{3}{8}vw^2x^2)$

15. The value of $\frac{3}{4}jk(\frac{1}{3}jk^2+\frac{2}{3}kl^2+\frac{1}{2})$ is

(i) $(\frac{1}{4}j^2k^3+\frac{1}{2}jk^2l^2+\frac{3}{8}jk)$ (ii) $(\frac{1}{2}j^2k^3+\frac{1}{2}jk^2l^2+\frac{3}{8}jk)$ (iii) $(\frac{1}{6}j^2k^3+\frac{1}{2}jk^2l^2+\frac{3}{8}jk)$ (iv) $(\frac{1}{4}j^2k^3+\frac{3}{2}jk^2l^2+\frac{3}{8}jk)$

(v) $(\frac{1}{4}j^2k^3-\frac{1}{2}jk^2l^2+\frac{3}{8}jk)$

16. The value of $(-6jk-5j)\times(4jk+4k)$ is

(i) $(-24j^2k^2-22j^2k-24jk^2-20jk)$ (ii) $(-24j^2k^2-18j^2k-24jk^2-20jk)$

(iii) $(-25j^2k^2-20j^2k-24jk^2-20jk)$ (iv) $(-23j^2k^2-20j^2k-24jk^2-20jk)$

(v) $(-24j^2k^2-20j^2k-24jk^2-20jk)$

17. The value of $(2r^2+2)\times(8s+7)$ is

(i) $(16r^2s+16r^2+16s+14)$ (ii) $(15r^2s+14r^2+16s+14)$ (iii) $(16r^2s+14r^2+16s+14)$

(iv) $(17r^2s+14r^2+16s+14)$ (v) $(16r^2s+11r^2+16s+14)$

18. The value of $(no-9n)\times(-no-6o)\times(6no+6n)$ is

(i) $(-7n^3o^3+48n^3o^2+54n^3o-36n^2o^3+288n^2o^2+324n^2o)$

(ii) $(-6n^3o^3+48n^3o^2+54n^3o-36n^2o^3+288n^2o^2+324n^2o)$

(iii) $(-6n^3o^3+46n^3o^2+54n^3o-36n^2o^3+288n^2o^2+324n^2o)$

(iv) $(-6n^3o^3+50n^3o^2+54n^3o-36n^2o^3+288n^2o^2+324n^2o)$

(v) $(-5n^3o^3+48n^3o^2+54n^3o-36n^2o^3+288n^2o^2+324n^2o)$

19. The value of $\frac{3}{5}w \times \frac{1}{5}v$ is

(i) $\frac{3}{25}vw$ (ii) $\frac{1}{9}vw$ (iii) $\frac{1}{25}vw$ (iv) $\frac{3}{23}vw$ (v) $\frac{1}{5}vw$

20. The value of $\frac{1}{5} \times \frac{1}{2}k \times \frac{1}{5}j \times \frac{1}{3}j$ is

(i) $\frac{1}{50}j^2k$ (ii) $\frac{1}{148}j^2k$ (iii) $\frac{1}{150}j^2k$ (iv) $\frac{1}{152}j^2k$ (v) $(-\frac{1}{150}j^2k)$

21. The value of $\frac{1}{2}x^2yz \times \frac{3}{4}xyz^2$ is

(i) $\frac{1}{2}x^3y^2z^3$ (ii) $\frac{1}{8}x^3y^2z^3$ (iii) $\frac{3}{10}x^3y^2z^3$ (iv) $\frac{3}{8}x^3y^2z^3$ (v) $\frac{5}{8}x^3y^2z^3$

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

(i) $\frac{4}{133}n^3$ (ii) $\frac{2}{45}n^3$ (iii) $\frac{4}{137}n^3$ (iv) $\frac{2}{135}n^3$ (v) $\frac{4}{135}n^3$

23. The value of $k \times k \times k$ is

(i) 0 (ii) $2k^3$ (iii) $(-k^3)$ (iv) k^3 (v) $4k^3$

24. The value of $(-3) \times r \times (-5) \times (-1)$ is

(i) $(-14r)$ (ii) $(-16r)$ (iii) $(-18r)$ (iv) $(-15r)$ (v) $(-13r)$

25. The value of $3y \times (-y)$ is

(i) $(-4y^2)$ (ii) $(-6y^2)$ (iii) $(-y^2)$ (iv) $(-2y^2)$ (v) $(-3y^2)$

26. The value of $(-4r) \times (-5r) \times 3r^2$ is

(i) $63r^4$ (ii) $61r^4$ (iii) $60r^4$ (iv) $58r^4$ (v) $59r^4$

27. The value of $(f-2) \times (-6f-1)$ is

(i) $(-4f^2+11f+2)$ (ii) $(-8f^2+11f+2)$ (iii) $(-5f^2+11f+2)$ (iv) $(-7f^2+11f+2)$ (v) $(-6f^2+11f+2)$

28. The value of $(-5s^2+s+2) \times (5s^2-2s-4)$ is

(i) $(-24s^4+15s^3+28s^2-8s-8)$ (ii) $(-26s^4+15s^3+28s^2-8s-8)$ (iii) $(-22s^4+15s^3+28s^2-8s-8)$

(iv) $(-28s^4+15s^3+28s^2-8s-8)$ (v) $(-25s^4+15s^3+28s^2-8s-8)$

29. The value of $(a^2-9a-1) \times (6a^2+9a+5)$ is

(i) $(6a^4-45a^3-82a^2-54a-5)$ (ii) $(9a^4-45a^3-82a^2-54a-5)$ (iii) $(7a^4-45a^3-82a^2-54a-5)$

(iv) $(4a^4-45a^3-82a^2-54a-5)$ (v) $(5a^4-45a^3-82a^2-54a-5)$

30. The value of $(-3q^2+4q)\times(2q^2-9q)\times(8q-9)$ is

(i) $(-48q^5+334q^4-603q^3+324q^2)$ (ii) $(-49q^5+334q^4-603q^3+324q^2)$

(iii) $(-45q^5+334q^4-603q^3+324q^2)$ (iv) $(-47q^5+334q^4-603q^3+324q^2)$

(v) $(-50q^5+334q^4-603q^3+324q^2)$

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

(i) $\frac{1}{4}$ (ii) $\frac{1}{2}$ (iii) $\frac{1}{8}$ (iv) $\frac{1}{6}$ (v) $(-\frac{1}{6})$

32. The value of $\frac{3}{4}\times\frac{1}{4}\times\frac{3}{5}\times\frac{2}{5}p$ is

(i) $\frac{7}{200}p$ (ii) $\frac{9}{200}p$ (iii) $\frac{9}{202}p$ (iv) $\frac{11}{200}p$ (v) $\frac{1}{22}p$

33. The value of $\frac{1}{2}z^2\times\frac{1}{2}z$ is

(i) $\frac{1}{4}z^3$ (ii) $\frac{1}{6}z^3$ (iii) $\frac{1}{2}z^3$ (iv) $\frac{3}{4}z^3$ (v) $(-\frac{1}{4}z^3)$

34. The value of $\frac{3}{5}i\times\frac{2}{5}i\times\frac{1}{5}i^2$ is

(i) $\frac{2}{41}i^4$ (ii) $\frac{6}{127}i^4$ (iii) $\frac{8}{125}i^4$ (iv) $\frac{6}{125}i^4$ (v) $\frac{4}{125}i^4$

35. The expanded form of $(3x+9)(3x+1)$ is

(i) $(7x^2+30x+9)$ (ii) $(11x^2+30x+9)$ (iii) $(8x^2+30x+9)$ (iv) $(9x^2+30x+9)$ (v) $(10x^2+30x+9)$

36. The expanded form of $(3x+7)(2x+8)(2x-2)$ is

(i) $(13x^3+64x^2+36x-112)$ (ii) $(12x^3+64x^2+36x-112)$ (iii) $(15x^3+64x^2+36x-112)$

(iv) $(11x^3+64x^2+36x-112)$ (v) $(9x^3+64x^2+36x-112)$

37. The expanded form of $(x-2)(x-3)(x-4)(x+1)$ is

(i) $(3x^4-8x^3+17x^2+2x-24)$ (ii) $(x^4-8x^3+17x^2+2x-24)$ (iii) $(-x^4-8x^3+17x^2+2x-24)$

(iv) $(2x^4-8x^3+17x^2+2x-24)$ (v) $(-8x^3+17x^2+2x-24)$

Assignment Key

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