

EduSahara™ Learning Center Assignment

Grade : Class VII, ICSE
Chapter : Algebraic Expressions
Name : Multiplication of Algebraic Expressions
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The product of the terms

1. $(-5q), qr, 3q, 5, (-3)$ is

(i) $222q^3r$ (ii) $224q^3r$ (iii) $225q^3r$

(iv) $226q^3r$ (v) $228q^3r$

The product of the terms

2. $(-4rs), (-3rs), (-4rst), 5, 2$ is

(i) $(-480r^3s^3t)$ (ii) $(-482r^3s^3t)$ (iii) $(-481r^3s^3t)$

(iv) $(-479r^3s^3t)$ (v) $(-478r^3s^3t)$

The product of the terms

3. $5, (-3), 1, 5, 3$ is

(i) (-227) (ii) (-225) (iii) (-224)

(iv) (-226) (v) (-223)

The value of

4. $2 \times (-5)$ is

(i) (-10) (ii) (-12) (iii) (-8)

(iv) (-9) (v) (-11)

The value of

5. $5u \times 4t \times t \times (-4t)$ is

(i) $(-83t^3u)$ (ii) $(-81t^3u)$ (iii) $(-77t^3u)$

$$(iv) (-79t^3u) \quad (v) (-80t^3u)$$

The value of

6. $(-7p^2q^2r) \times (-3p^2)$ is

(i) $23p^4q^2r$ (ii) $20p^4q^2r$ (iii) $22p^4q^2r$

(iv) $21p^4q^2r$ (v) $19p^4q^2r$

The value of

7. $(-6lm) \times k \times (-kl) \times (-6)$ is

(i) $(-35k^2l^2m)$ (ii) $(-37k^2l^2m)$ (iii) $(-36k^2l^2m)$

(iv) $(-34k^2l^2m)$ (v) $(-39k^2l^2m)$

8. The value of $(-1)(5o-4p)$ is

(i) $(-5o+6p)$ (ii) $(-6o+4p)$

(iii) $(-5o+2p)$ (iv) $(-4o+4p)$

(v) $(-5o+4p)$

9. The value of $(-r)(-2q^2+5qr)$ is

(i) $(2q^2r-3qr^2)$ (ii) $(2q^2r-5qr^2)$

(iii) (q^2r-5qr^2) (iv) $(2q^2r-8qr^2)$

(v) $(3q^2r-5qr^2)$

10. The value of $5y(x^2y^2-4z^2)$ is

(i) $(6x^2y^3-20yz^2)$ (ii) $(5x^2y^3-17yz^2)$

$$(iii) (5x^2y^3 - 20yz^2) \quad (iv) (5x^2y^3 - 22yz^2)$$

$$(v) (4x^2y^3 - 20yz^2)$$

11. The value of $3bc(-a^2bc - ac^2 + 3ac)$ is

$$(i) (-3a^2b^2c^2 + 9abc^2) \quad (ii) (-4a^2b^2c^2 - 3abc^3 + 9abc^2)$$

$$(iii) (-3a^2b^2c^2 - 6abc^3 + 9abc^2) \quad (iv) (-2a^2b^2c^2 - 3abc^3 + 9abc^2)$$

$$(v) (-3a^2b^2c^2 - 3abc^3 + 9abc^2)$$

12. The value of $\frac{1}{4}(\frac{1}{2}q + \frac{2}{5})$ is

$$(i) (\frac{1}{8}q - \frac{1}{10}) \quad (ii) (\frac{1}{10}q + \frac{1}{10})$$

$$(iii) (\frac{1}{8}q + \frac{1}{10}) \quad (iv) (\frac{1}{8}q + \frac{3}{10})$$

$$(v) (\frac{1}{6}q + \frac{1}{10})$$

13. The value of $\frac{1}{5}(\frac{2}{5}op^2 + \frac{1}{2}p)$ is

$$(i) (\frac{2}{25}op^2 + \frac{1}{10}p) \quad (ii) (\frac{2}{27}op^2 + \frac{1}{10}p)$$

$$(iii) (\frac{2}{25}op^2 - \frac{1}{10}p) \quad (iv) (\frac{2}{25}op^2 + \frac{3}{10}p)$$

$$(v) (\frac{2}{23}op^2 + \frac{1}{10}p)$$

14. The value of $\frac{4}{5}rs(\frac{2}{3}r^2s + \frac{1}{2}st^2)$ is

$$(i) \frac{8}{15}r^3s^2 \quad (ii) (\frac{8}{17}r^3s^2 + \frac{2}{5}rs^2t^2)$$

$$(iii) (\frac{8}{13}r^3s^2 + \frac{2}{5}rs^2t^2) \quad (iv) (\frac{8}{15}r^3s^2 + \frac{4}{5}rs^2t^2)$$

$$(v) (\frac{8}{15}r^3s^2 + \frac{2}{5}rs^2t^2)$$

15. The value of $\frac{1}{2}z \left(\frac{2}{5}x^2y^2z^2 + \frac{1}{5}xyz + \frac{2}{3}z \right)$ is

(i) $\left(\frac{1}{5}x^2y^2z^3 - \frac{1}{10}xyz^2 + \frac{1}{3}z^2 \right)$ (ii) $\left(\frac{1}{7}x^2y^2z^3 + \frac{1}{10}xyz^2 + \frac{1}{3}z^2 \right)$

(iii) $\left(\frac{1}{5}x^2y^2z^3 + \frac{3}{10}xyz^2 + \frac{1}{3}z^2 \right)$ (iv) $\left(\frac{1}{5}x^2y^2z^3 + \frac{1}{10}xyz^2 + \frac{1}{3}z^2 \right)$

(v) $\left(\frac{1}{3}x^2y^2z^3 + \frac{1}{10}xyz^2 + \frac{1}{3}z^2 \right)$

The value of

16. $(-2v - 7) \times (-8vw - 4)$ is

(i) $(16v^2w + 53vw + 8v + 28)$

(ii) $(16v^2w + 59vw + 8v + 28)$

(iii) $(17v^2w + 56vw + 8v + 28)$

(iv) $(15v^2w + 56vw + 8v + 28)$

(v) $(16v^2w + 56vw + 8v + 28)$

The value of

17. $(5d^2 - 6de^2) \times (-9de^2 + 13d)$ is

(i) $(-45d^3e^2 + 68d^3 + 54d^2e^4 - 78d^2e^2)$

(ii) $(-45d^3e^2 + 65d^3 + 54d^2e^4 - 78d^2e^2)$

(iii) $(-44d^3e^2 + 65d^3 + 54d^2e^4 - 78d^2e^2)$

(iv) $(-46d^3e^2 + 65d^3 + 54d^2e^4 - 78d^2e^2)$

(v) $(-45d^3e^2 + 63d^3 + 54d^2e^4 - 78d^2e^2)$

The value of

18. $(-2f + 1) \times (-6ef + 8f) \times (3e - 4f)$ is

(i) $(36e^2f^2 - 21e^2f - 48ef^3 - 24ef^2 + 24ef + 64f^3 - 32f^2)$

(ii) $(36e^2f^2 - 16e^2f - 48ef^3 - 24ef^2 + 24ef + 64f^3 - 32f^2)$

(iii) $(36e^2f^2 - 18e^2f - 48ef^3 - 24ef^2 + 24ef + 64f^3 - 32f^2)$

(iv) $(35e^2f^2 - 18e^2f - 48ef^3 - 24ef^2 + 24ef + 64f^3 - 32f^2)$

(v) $(37e^2f^2 - 18e^2f - 48ef^3 - 24ef^2 + 24ef + 64f^3 - 32f^2)$

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

(i) $\frac{2}{11}t$ (ii) $\frac{2}{7}t$ (iii) $\frac{4}{9}t$

(iv) $\frac{2}{9}t$ (v) 0

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

(i) $\frac{1}{18}k$ (ii) $\frac{3}{20}k$ (iii) $\frac{1}{22}k$

(iv) $\frac{1}{20}k$ (v) $(-\frac{1}{20}k)$

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

(i) $\frac{1}{2}i^2j^3$ (ii) $\frac{1}{8}i^2j^3$ (iii) $\frac{3}{8}i^2j^3$

(iv) $\frac{5}{8}i^2j^3$ (v) $\frac{3}{10}i^2j^3$

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

(i) $\frac{1}{22}v^3w^3x^3$ (ii) $\frac{1}{20}v^3w^3x^3$ (iii) $\frac{3}{20}v^3w^3x^3$

(iv) $\frac{1}{18}v^3w^3x^3$ (v) $(-\frac{1}{20}v^3w^3x^3)$

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

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

24. The value of $2s \times 5s \times 2s \times (-2)$ is

- (i) $(-38s^3)$ (ii) $(-39s^3)$ (iii) $(-43s^3)$ (iv) $(-41s^3)$ (v) $(-40s^3)$
-

25. The value of $(-7n^2) \times 6n^2$ is

- (i) $(-43n^4)$ (ii) $(-42n^4)$ (iii) $(-39n^4)$ (iv) $(-45n^4)$ (v) $(-41n^4)$
-

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

- (i) $27d^6$ (ii) $23d^6$ (iii) $25d^6$ (iv) $21d^6$ (v) $24d^6$
-

27. The value of $(g + 7) \times (5g - 7)$ is

- (i) $(5g^2 + 28g - 49)$ (ii) $(4g^2 + 28g - 49)$ (iii) $(6g^2 + 28g - 49)$
(iv) $(3g^2 + 28g - 49)$ (v) $(8g^2 + 28g - 49)$
-

28. The value of $(4k^2 - 6k - 9) \times (8k^2 + 9k + 6)$ is

- (i) $(30k^4 - 12k^3 - 102k^2 - 117k - 54)$
(ii) $(33k^4 - 12k^3 - 102k^2 - 117k - 54)$
(iii) $(31k^4 - 12k^3 - 102k^2 - 117k - 54)$
(iv) $(34k^4 - 12k^3 - 102k^2 - 117k - 54)$
(v) $(32k^4 - 12k^3 - 102k^2 - 117k - 54)$
-

29. The value of $(-c^2 + 6c - 3) \times (-6c^2 + 5c + 4)$ is

- (i) $(4c^4 - 41c^3 + 44c^2 + 9c - 12)$

(ii) $(5c^4 - 41c^3 + 44c^2 + 9c - 12)$

(iii) $(7c^4 - 41c^3 + 44c^2 + 9c - 12)$

(iv) $(6c^4 - 41c^3 + 44c^2 + 9c - 12)$

(v) $(9c^4 - 41c^3 + 44c^2 + 9c - 12)$

30. The value of $(-6w^2 + 1) \times (2w - 3) \times (6w^2 + 9)$ is

(i) $(-71w^5 + 108w^4 - 96w^3 + 144w^2 + 18w - 27)$

(ii) $(-70w^5 + 108w^4 - 96w^3 + 144w^2 + 18w - 27)$

(iii) $(-75w^5 + 108w^4 - 96w^3 + 144w^2 + 18w - 27)$

(iv) $(-72w^5 + 108w^4 - 96w^3 + 144w^2 + 18w - 27)$

(v) $(-73w^5 + 108w^4 - 96w^3 + 144w^2 + 18w - 27)$

31. The value of $\frac{1}{2}c \times \frac{1}{2}c \times \frac{4}{5}$ is

(i) $\frac{3}{5}c^2$ (ii) $\frac{1}{5}c^2$ (iii) $(-\frac{1}{5}c^2)$ (iv) $\frac{1}{7}c^2$ (v) $\frac{1}{3}c^2$

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

(i) $\frac{1}{4}t^2$ (ii) $\frac{3}{20}t^2$ (iii) $\frac{3}{22}t^2$ (iv) $\frac{1}{6}t^2$ (v) $\frac{1}{20}t^2$

33. The value of $\frac{4}{5}t^2 \times \frac{2}{3}t$ is

(i) $\frac{2}{3}t^3$ (ii) $\frac{2}{5}t^3$ (iii) $\frac{8}{17}t^3$ (iv) $\frac{8}{13}t^3$ (v) $\frac{8}{15}t^3$

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

$$(i) \frac{1}{12} b^6 \quad (ii) \frac{1}{10} b^6 \quad (iii) \frac{1}{14} b^6 \quad (iv) \left(-\frac{1}{12} b^6 \right) \quad (v) \frac{1}{4} b^6$$

35. The expanded form of $(3x + 4)(3x - 6)$ is

(i) $(10x^2 - 6x - 24)$

(ii) $(8x^2 - 6x - 24)$

(iii) $(11x^2 - 6x - 24)$

(iv) $(9x^2 - 6x - 24)$

(v) $(7x^2 - 6x - 24)$

36. The expanded form of $(x + 3)(3x - 1)(x + 8)$ is

(i) $(2x^3 + 32x^2 + 61x - 24)$

(ii) $(3x^3 + 32x^2 + 61x - 24)$

(iii) $(32x^2 + 61x - 24)$

(iv) $(6x^3 + 32x^2 + 61x - 24)$

(v) $(4x^3 + 32x^2 + 61x - 24)$

37. The expanded form of $(x + 7)(x - 1)(x - 6)(x - 6)$ is

(i) $(-6x^3 - 43x^2 + 300x - 252)$

(ii) $(x^4 - 6x^3 - 43x^2 + 300x - 252)$

(iii) $(4x^4 - 6x^3 - 43x^2 + 300x - 252)$

(iv) $(2x^4 - 6x^3 - 43x^2 + 300x - 252)$

(v) $(-2x^4 - 6x^3 - 43x^2 + 300x - 252)$

Assignment Key

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