EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Operations on Algebraic Expressions

Grade : ICSE Grade VI

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1. Which of the following terms can be added to $(-8i)$?

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

2. The value of $5z-(-9z)$ is

   (i) $13z$ (ii) $11z$ (iii) $14z$ (iv) $16z$ (v) $15z$

3. The value of $(-2m^5)-9m^5-8m^5$ is

   (i) $(-20m^5)$ (ii) $(-17m^5)$ (iii) $(-19m^5)$ (iv) $(-18m^5)$ (v) $(-21m^5)$

4. The value of $(8d+3)-(8d+7)$ is

   (i) (-4) (ii) (-6) (iii) (-3) (iv) (-5) (v) (-2)

5. The value of $(-6n^2-8n-5)+(-2n^4-5n^2-7)+(-3n^4+8n^3-8n^2)+(6n^5-7n^4+9)$ is

   (i) $(6n^5-12n^4+8n^3-19n^2-8n-3)$ (ii) $(5n^5-12n^4+8n^3-19n^2-8n-3)$

   (iii) $(4n^5-12n^4+8n^3-19n^2-8n-3)$ (iv) $(8n^5-12n^4+8n^3-19n^2-8n-3)$

   (v) $(7n^5-12n^4+8n^3-19n^2-8n-3)$

6. The product of the terms $(-5qr),(-5qr),4r,3,(-1)$ is

   (i) $(-303q^2r^3)$ (ii) $(-300q^2r^3)$ (iii) $(-301q^2r^3)$ (iv) $(-299q^2r^3)$ (v) $(-298q^2r^3)$

7. The value of $(-4l^2mn^2+2lm^2n^2+m^2n)-(7l^2m^2n^2-6l^2m^2n+7ln^2)-(4lm^2n^2-8m^2+7m)$ is

   (i) $(-8l^2m^2n^2+6l^2m^2n-4l^2mn^2-2lm^2n^2-7ln^2+m^2n+8m^2-7m)$

   (ii) $(-6l^2m^2n^2+6l^2m^2n-4l^2mn^2-2lm^2n^2-7ln^2+m^2n+8m^2-7m)$

   (iii) $(-7l^2m^2n^2+3l^2m^2n-4l^2mn^2-2lm^2n^2-7ln^2+m^2n+8m^2-7m)$

   (iv) $(-7l^2m^2n^2+6l^2m^2n-4l^2mn^2-2lm^2n^2-7ln^2+m^2n+8m^2-7m)$

   (v) $(-7l^2m^2n^2+9l^2m^2n-4l^2mn^2-2lm^2n^2-7ln^2+m^2n+8m^2-7m)$

8. The value of $6a\times 7a$ is

   (i) $43a^2$ (ii) $41a^2$ (iii) $44a^2$ (iv) $39a^2$ (v) $42a^2$

9. The value of $(5w-7xy+4x)-(-7wy+2w+xy)$ is

   (i) $(6wy+3w-8xy+4x)$ (ii) $(7wy+6w-8xy+4x)$ (iii) $(8wy+3w-8xy+4x)$ (iv) $(7wy+3w-8xy+4x)$

   (v) $(7wy+w-8xy+4x)$

10. The value of $\frac{1}{2}m^2 - \frac{3}{4}m^2 - \frac{3}{5}m^2$ is

(i) $(-\frac{17}{22}m^2)$ (ii) $(-\frac{3}{4}m^2)$ (iii) $(-\frac{19}{20}m^2)$ (iv) $(-\frac{17}{20}m^2)$ (v) $(-\frac{17}{18}m^2)$

11. The sum of the expressions $(-3uv-2v), (-5v-6), (-v+6), (8v+2), (-3uv-4u)$ is

(i) $(-6uv-4u+2)$ (ii) $(-6uv-2u+2)$ (iii) $(-7uv-4u+2)$ (iv) $(-6uv-7u+2)$ (v) $(-5uv-4u+2)$

12. The value of $5q+(-9q)$ is

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

13. The value of $(-7ij+4i-2j)+(hi-8hj-ij)$ is

(i) $(hi-11hj-8ij+4i-2j)$ (ii) $(hi-8hj-8ij+4i-2j)$ (iii) $(-8hj-8ij+4i-2j)$ (iv) $(2hi-8hj-8ij+4i-2j)$

(v) $(hi-5hj-8ij+4i-2j)$

14. The sum of the terms $(-4q), (-8pq), (-7q), pq, (-7q)$ is

(i) $(-6pq-18q)$ (ii) $(-7pq-21q)$ (iii) $(-7pq-18q)$ (iv) $(-8pq-18q)$ (v) $(-7pq-16q)$

15. The value of $\frac{1}{2}f^2g^2 + \frac{1}{4}f^2g^2 + \frac{1}{2}f^2g^2 + \frac{1}{2}f^2g^2$ is

(i) $\frac{5}{2}f^2g^2$ (ii) $\frac{5}{4}f^2g^2$ (iii) $\frac{9}{4}f^2g^2$ (iv) $\frac{3}{2}f^2g^2$ (v) $\frac{7}{4}f^2g^2$

16. The value of $\frac{1}{2}d^2 \times \frac{1}{4}d^2$ is

(i) $\frac{1}{8}d^4$ (ii) $\frac{1}{6}d^4$ (iii) $\frac{1}{10}d^4$ (iv) $(-\frac{1}{8}d^4)$ (v) $\frac{3}{8}d^4$

17. The value of $\frac{1}{2}z^3 - \frac{2}{5}z^3$ is

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

18. The value of $(8u^2v^2-5u^2-9u-4v)-(6uv+3u+18v^2+7v)$ is

(i) $(8u^2v^2-7u^2-6uv-12u-18v^2-11v)$ (ii) $(7u^2v^2-5u^2-6uv-12u-18v^2-11v)$

(iii) $(9u^2v^2-5u^2-6uv-12u-18v^2-11v)$ (iv) $(8u^2v^2-3u^2-6uv-12u-18v^2-11v)$

(v) $(8u^2v^2-5u^2-6uv-12u-18v^2-11v)$

19. The value of $\frac{1}{3}b \times \frac{1}{2}bc \times \frac{1}{5}b \times \frac{1}{4}$ is

(i) $\frac{1}{122}b^3c$ (ii) $(-\frac{1}{120}b^3c)$ (iii) $\frac{1}{120}b^3c$ (iv) $\frac{1}{118}b^3c$ (v) $\frac{1}{40}b^3c$

20. The value of $7lm+8lm$ is

(i) $17lm$ (ii) $12lm$ (iii) $16lm$ (iv) $15lm$ (v) $14lm$

21. The value of $5p(-3o^2p^2q^2+5o^2p)$ is

(i) $(-15o^2p^3q^2+28o^2p^2)$ (ii) $(-15o^2p^3q^2+25o^2p^2)$ (iii) $(-14o^2p^3q^2+25o^2p^2)$

(iv) $(-16o^2p^3q^2+25o^2p^2)$ (v) $(-15o^2p^3q^2+22o^2p^2)$

22. The value of $(-3uv-14u+3v)-(-6u-7v-5)$ is

(i) $(-2uv-8u+10v+5)$ (ii) $(-4uv-8u+10v+5)$ (iii) $(-3uv-8u+10v+5)$ (iv) $(-3uv-11u+10v+5)$

(v) $(-3uv-5u+10v+5)$

23. The value of $\frac{1}{5}o(\frac{3}{4}o^2p^2q+\frac{3}{5}o^2q+\frac{2}{3}oq^2)$ is

(i) $(\frac{3}{20}o^3p^2q+\frac{1}{5}o^3q+\frac{2}{15}o^2q^2)$ (ii) $(\frac{3}{20}o^3p^2q+\frac{3}{25}o^3q+\frac{2}{15}o^2q^2)$ (iii) $(\frac{1}{6}o^3p^2q+\frac{3}{25}o^3q+\frac{2}{15}o^2q^2)$

(iv) $(\frac{3}{22}o^3p^2q+\frac{3}{25}o^3q+\frac{2}{15}o^2q^2)$ (v) $(\frac{3}{20}o^3p^2q+\frac{1}{25}o^3q+\frac{2}{15}o^2q^2)$

24. The value of $(4s+4)+(8s-4)$ is

(i) $15s$ (ii) $11s$ (iii) $12s$ (iv) $13s$ (v) $9s$

25. The value of $\frac{1}{5}s\times\frac{1}{5}qs\times\frac{1}{5}s\times\frac{1}{5}q$ is

(i) $\frac{1}{623}q^2s^3$ (ii) $\frac{1}{627}q^2s^3$ (iii) $(-\frac{1}{625}q^2s^3)$ (iv) $\frac{1}{625}q^2s^3$ (v) $\frac{3}{625}q^2s^3$

Assignment Key

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

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