

EduSahara™ Learning Center Assignment

Grade : Class IX, SSC

Chapter : Polynomials and Factorisation

Name : Polynomial Power Expansion

1. The expanded form of $(w)^3$ is

(i) $w \times w \times w$

(ii) $w \times w \times w \times w \times w$

(iii) $w \times w$

(iv) w

(v) $w \times w \times w \times w$

2. The expanded form of $(\frac{3}{5}d)^3$ is

(i) $\frac{3}{5}d \times \frac{3}{5}d \times \frac{3}{5}d \times \frac{3}{5}d$

(ii) $\frac{3}{5}d \times \frac{3}{5}d$

(iii) $\frac{3}{5}d \times \frac{3}{5}d \times \frac{3}{5}d \times \frac{3}{5}d \times \frac{3}{5}d$

(iv) $\frac{3}{5}d \times \frac{3}{5}d \times \frac{3}{5}d$

(v) $\frac{3}{5}d$

3. The expanded form of $(4gh)^3$ is

(i) $4gh \times 4gh \times 4gh$

(ii) $4gh \times 4gh$

(iii) $4gh$

(iv) $4gh \times 4gh \times 4gh \times 4gh$

(v) $4gh \times 4gh \times 4gh \times 4gh \times 4gh$

4. The expanded form of $(\frac{1}{2}no)^3$ is

(i) $\frac{1}{2}no \times \frac{1}{2}no \times \frac{1}{2}no \times \frac{1}{2}no \times \frac{1}{2}no$

(ii) $\frac{1}{2}no \times \frac{1}{2}no$

(iii) $\frac{1}{2}no$

(iv) $\frac{1}{2}no \times \frac{1}{2}no \times \frac{1}{2}no$

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(v) $\frac{7}{2}no \times \frac{7}{2}no \times \frac{7}{2}no \times \frac{7}{2}no$

5. The expanded form of $(7q + 1)^3$ is

(i) $(7q + 1) \times (7q + 1) \times (7q + 1)$

(ii) $(7q + 1) \times (7q + 1) \times (7q + 1) \times (7q + 1)$

(iii) $(7q + 1) \times (7q + 1)$

(iv) $(7q + 1) \times (7q + 1) \times (7q + 1) \times (7q + 1) \times (7q + 1)$

(v) $(7q + 1)$

6. The expanded form of $(\frac{1}{2}e + \frac{1}{5})^3$ is

(i) $(\frac{1}{2}e + \frac{1}{5})$

(ii) $(\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5})$

(iii) $(\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5})$

(iv) $(\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5})$

(v) $(\frac{1}{2}e + \frac{1}{5}) \times (\frac{1}{2}e + \frac{1}{5})$

7. The expanded form of $(-h)^3$ is

(i) $(-h) \times (-h) \times (-h)$

(ii) $(-h) \times (-h)$

(iii) $(-h) \times (-h) \times (-h) \times (-h)$

(iv) $(-h) \times (-h) \times (-h) \times (-h) \times (-h)$

(v) $(-h)$

8. The expanded form of $(\frac{1}{4}j)^3$ is

(i) $\frac{1}{4}j$

(ii) $\frac{1}{4}j \times \frac{1}{4}j \times \frac{1}{4}j \times \frac{1}{4}j \times \frac{1}{4}j$

(iii) $\frac{1}{4}j \times \frac{1}{4}j$

(iv) $\frac{1}{4}j \times \frac{1}{4}j \times \frac{1}{4}j$

(v) $\frac{1}{4}j \times \frac{1}{4}j \times \frac{1}{4}j \times \frac{1}{4}j$

9. The expanded form of $(3ef)^3$ is

- (i) $3ef$
 - (ii) $3ef \times 3ef \times 3ef \times 3ef \times 3ef$
 - (iii) $3ef \times 3ef$
 - (iv) $3ef \times 3ef \times 3ef$
 - (v) $3ef \times 3ef \times 3ef \times 3ef$
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10. The expanded form of $(\frac{1}{2}op)^3$ is

- (i) $\frac{1}{2}op \times \frac{1}{2}op \times \frac{1}{2}op \times \frac{1}{2}op$
 - (ii) $\frac{1}{2}op \times \frac{1}{2}op \times \frac{1}{2}op$
 - (iii) $\frac{1}{2}op$
 - (iv) $\frac{1}{2}op \times \frac{1}{2}op$
 - (v) $\frac{1}{2}op \times \frac{1}{2}op \times \frac{1}{2}op \times \frac{1}{2}op \times \frac{1}{2}op$
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11. The expanded form of $(-4x - 2)^3$ is

- (i) $(-4x - 2) \times (-4x - 2) \times (-4x - 2)$
 - (ii) $(-4x - 2)$
 - (iii) $(-4x - 2) \times (-4x - 2) \times (-4x - 2) \times (-4x - 2) \times (-4x - 2)$
 - (iv) $(-4x - 2) \times (-4x - 2) \times (-4x - 2) \times (-4x - 2)$
 - (v) $(-4x - 2) \times (-4x - 2)$
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12. The expanded form of $(\frac{4}{5}jk + k)^3$ is

- (i) $(\frac{4}{5}jk + k)$
 - (ii) $(\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k)$
 - (iii) $(\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k)$
 - (iv) $(\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k)$
 - (v) $(\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k) \times (\frac{4}{5}jk + k)$
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Assignment Key

- 1) (i)
- 2) (iv)
- 3) (i)
- 4) (iv)
- 5) (i)
- 6) (iii)
- 7) (i)
- 8) (iv)
- 9) (iv)
- 10) (ii)
- 11) (i)
- 12) (v)