

EduSahara™ Learning Center Assignment**Grade : Class VII, ICSE****Chapter : Exponents****Name : Exponents Concepts****Licensed To : Teachers and Students for non-commercial use**

1. The base in the term 8^4 is

(i) 8 (ii) 6 (iii) 4 (iv) -8 (v) -4

2. The exponent in the term 2^4 is

(i) 2 (ii) -2 (iii) 1 (iv) -4 (v) 4

3. The power in the term 3^4 is

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

4. The base in the term $\left(\frac{9}{7}\right)^3$ is

(i) -3 (ii) 1 (iii) 3 (iv) $\left(-\frac{9}{7}\right)$ (v) $\frac{9}{7}$

5. The exponent in the term $\left(\frac{7}{4}\right)^5$ is

(i) 3 (ii) 5 (iii) $\left(-\frac{7}{4}\right)$ (iv) -5 (v) $\frac{7}{4}$

6. The power in the term $\left(\frac{8}{7}\right)^4$ is

(i) 4 (ii) -4 (iii) $\left(-\frac{8}{7}\right)$ (iv) $\frac{8}{7}$ (v) 2

7. The exponent in the term $\left(\frac{5}{4}\right)$ is

8

$$(i) \frac{8}{1} \quad (ii) -8 \quad (iii) \frac{5}{4} \quad (iv) \left(\frac{-5}{4}\right) \quad (v) \frac{3}{4}$$

$$8. (7 \times -4)^{-5} =$$

$$(i) 7^{-5} \times (-6)^{-5} \quad (ii) 7^{-5} \times (-1)^{-5}$$

$$(iii) 7^{-5} \times (-4)^{-5} \quad (iv) 7^{-5} \times (-4)^{-6}$$

$$(v) 7^{-5} \times (-4)^{-4}$$

$$9. (-7 \times -6 \times 5)^{-3} =$$

$$(i) (-7)^{-3} \times (-6)^{-4} \times 5^{-4} \quad (ii) (-7)^{-3} \times (-4)^{-3} \times 7^{-3}$$

$$(iii) (-7)^{-3} \times (-8)^{-3} \times 3^{-3} \quad (iv) (-7)^{-3} \times (-6)^{-3} \times 5^{-3}$$

$$(v) (-7)^{-3} \times (-6)^{-2} \times 5^{-2}$$

$$10. \left(\frac{3}{1} \times \left(\frac{-7}{9}\right)\right)^{-3} =$$

$$(i) 3^{-3} \times \left(\frac{-7}{9}\right)^{-2} \quad (ii) 3^{-3} \times \left(\frac{-5}{9}\right)^{-3}$$

$$(iii) 3^{-3} \times \left(\frac{-7}{9}\right)^{-4} \quad (iv) 3^{-3} \times \left(\frac{-7}{9}\right)^{-3}$$

$$(v) 3^{-3} \times (-1)^{-3}$$

$$11. \left(\left(\frac{-5}{3}\right) \times \frac{8}{7} \times \left(\frac{-6}{7}\right)\right)^{-7} =$$

$$(i) \left(\frac{-5}{3}\right)^{-7} \times \left(\frac{8}{7}\right)^{-7} \times \left(\frac{-6}{7}\right)^{-7} \quad (ii) \left(\frac{-5}{3}\right)^{-7} \times \left(\frac{8}{7}\right)^{-8} \times \left(\frac{-6}{7}\right)^{-8}$$

$$(iii) \left(\frac{-5}{3}\right)^{-7} \times \left(\frac{6}{7}\right)^{-7} \times \left(\frac{-8}{7}\right)^{-7} \quad (iv) \left(\frac{-5}{3}\right)^{-7} \times \left(\frac{10}{7}\right)^{-7} \times \left(\frac{-4}{7}\right)^{-7}$$

$$(v) \left(\frac{-5}{3}\right)^{-7} \times \left(\frac{8}{7}\right)^{-6} \times \left(\frac{-6}{7}\right)^{-6}$$

Find the exponential notation of

12. $6 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6 \times 6$

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

Find the exponential notation of

13. $-6 \times -6 \times -6 \times -6 \times -6$

(i) $(-9)^5$ (ii) $(-6)^5$ (iii) $(-6)^4$ (iv) $(-3)^5$ (v) $(-6)^6$

Find the exponential notation of

14. $-11 \times -11 \times -11 \times -11 \times -11 \times -11$

(i) $(-11)^7$ (ii) $(-11)^6$ (iii) $(-13)^6$ (iv) $(-8)^6$ (v) $(-11)^5$

Find the exponential notation of

15. $13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13 \times 13$

(i) 15^8 (ii) 10^8 (iii) 13^9 (iv) 13^8 (v) 13^7

Find the exponential notation of

16. $\frac{4}{3} \times \frac{4}{3} \times \frac{4}{3} \times \frac{4}{3} \times \frac{4}{3} \times \frac{4}{3} \times \frac{4}{3}$

(i) $\left(\frac{4}{3}\right)^6$ (ii) $\left(\frac{2}{3}\right)^7$ (iii) 2^7 (iv) $\left(\frac{4}{3}\right)^8$ (v) $\left(\frac{4}{3}\right)^7$

Find the exponential notation of

17. $\frac{16}{13} \times \frac{16}{13} \times \frac{16}{13} \times \frac{16}{13} \times \frac{16}{13} \times \frac{16}{13} \times \frac{16}{13}$

(i) $\left(\frac{16}{13}\right)^8$ (ii) $\left(\frac{14}{13}\right)^7$ (iii) $\left(\frac{16}{13}\right)^6$ (iv) $\left(\frac{16}{13}\right)^7$ (v) $\left(\frac{18}{13}\right)^7$

Find the exponential notation of

18. $\left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right) \times \left(\frac{-6}{7}\right)$

(i) $\left(\frac{-6}{7}\right)^9$ (ii) $\left(\frac{-6}{7}\right)^7$ (iii) $\left(\frac{-4}{7}\right)^8$ (iv) $\left(\frac{-6}{7}\right)^8$ (v) $\left(\frac{-8}{7}\right)^8$

Find the exponential notation of

19. $\left(\frac{-15}{13}\right) \times \left(\frac{-15}{13}\right) \times \left(\frac{-15}{13}\right) \times \left(\frac{-15}{13}\right) \times \left(\frac{-15}{13}\right)$

(i) $\left(\frac{-17}{13}\right)^5$ (ii) $\left(\frac{-15}{13}\right)^4$ (iii) $(-1)^5$ (iv) $\left(\frac{-15}{13}\right)^6$ (v) $\left(\frac{-15}{13}\right)^5$

20. $m^3 =$

(i) $4 \times m \times m \times m$

(ii) $-2 \times m \times m \times m$

(iii) $m \times m \times m \times m$

(iv) $m \times m$

(v) $m \times m \times m$

21. $27i^4j^3 =$

(i) $25 \times i \times i \times i \times i \times j \times j \times j$

(ii) $27 \times i \times i \times i \times j \times j \times j$

(iii) $27 \times i \times i \times i \times i \times i \times j \times j \times j$

(iv) $27 \times i \times i \times i \times i \times j \times j \times j$

(v) $29 \times i \times i \times i \times i \times j \times j \times j$

22. $c^3d^4e^3 =$

(i) $-2 \times c \times c \times c \times d \times d \times d \times d \times e \times e \times e$

(ii) $c \times c \times c \times c \times d \times d \times d \times d \times e \times e \times e$

(iii) $c \times c \times c \times d \times d \times d \times d \times e \times e \times e$

(iv) $c \times c \times d \times d \times d \times d \times e \times e \times e$

(v) $4 \times c \times c \times c \times d \times d \times d \times d \times e \times e \times e$

23. $5 \times p \times p \times p =$

(i) $5p^3$

(ii) $2p^3$

(iii) $5p^2$

(iv) $8p^3$

(v) $5p^4$

24. $e \times e \times f \times f =$

(i) $3e^2f^2$

(ii) e^3f^2

(iii) ef^2

(iv) e^2f^2

(v) $-e^2f^2$

25. $b \times b \times c \times c \times d \times d \times d =$

(i) $b^3c^2d^3$

(ii) $b^2c^2d^3$

(iii) $-2b^2c^2d^3$

(iv) $3b^2c^2d^3$

(v) bc^2d^3

Assignment Key

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