EduSahara™ Assignment

Name : Exponents Concepts

Chapter : Exponents

Grade : ICSE Grade VII

1. The base in the term 8^{6} is

   (i) 8 (ii) 5 (iii) 6 (iv) -8 (v) -6

2. The exponent in the term 4^{8} is

   (i) -4 (ii) 5 (iii) 4 (iv) 8 (v) -8

3. The power in the term 4^{8} is

   (i) 5 (ii) 8 (iii) -8 (iv) -4 (v) 4

4. The base in the term $\left(\frac{9}{8}\right)^{9}$ is

   (i) -9 (ii) $\frac{9}{8}$ (iii) $(\frac{-9}{8})$ (iv) $\frac{7}{8}$ (v) 9

5. The exponent in the term $\left(\frac{7}{3}\right)^{5}$ is

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

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

   (i) 4 (ii) $(\frac{-7}{5})$ (iii) -4 (iv) $\frac{7}{5}$ (v) 1

7. The exponent in the term $\left(\frac{9}{8}\right)^{(5/4)}$ is

   (i) $(\frac{-5}{4})$ (ii) $\frac{3}{4}$ (iii) $\frac{5}{4}$ (iv) $\frac{9}{8}$ (v) $(\frac{-9}{8})$

8. $(-5 \times 6)^{-9} =$

   (i) $(-5)^{-9} \times 4^{-9}$ (ii) $(-5)^{-9} \times 6^{-9}$ (iii) $(-5)^{-9} \times 6^{-8}$ (iv) $(-5)^{-9} \times 6^{-10}$ (v) $(-5)^{-9} \times 8^{-9}$

9. $(-5 \times 2 \times 3)^{9} =$

(i) $(-5)^{9} \times 2^{9} \times 3^{9}$ (ii) $(-5)^{9} \times 2^{10} \times 3^{10}$ (iii) $(-5)^{9} \times (-1)^{9} \times 1$ (iv) $(-5)^{9} \times 2^{8} \times 3^{8}$ (v) $(-5)^{9} \times 5^{9} \times 6^{9}$

10. $\left(\left(\frac{-2}{9}\right) \times \frac{8}{5}\right)^{-6} =$

(i) $\left(\frac{-2}{9}\right)^{-6} \times \left(\frac{8}{5}\right)^{-5}$ (ii) $\left(\frac{-2}{9}\right)^{-6} \times \left(\frac{8}{5}\right)^{-6}$ (iii) $\left(\frac{-2}{9}\right)^{-6} \times 2^{-6}$ (iv) $\left(\frac{-2}{9}\right)^{-6} \times \left(\frac{8}{5}\right)^{-7}$ (v) $\left(\frac{-2}{9}\right)^{-6} \times \left(\frac{6}{5}\right)^{-6}$

11. $\left(\left(\frac{-9}{4}\right) \times \frac{8}{3} \times \frac{7}{4}\right)^{7} =$

(i) $\left(\frac{-9}{4}\right)^{7} \times 2^{7} \times \left(\frac{5}{4}\right)^{7}$ (ii) $\left(\frac{-9}{4}\right)^{7} \times \left(\frac{8}{3}\right)^{7} \times \left(\frac{7}{4}\right)^{7}$ (iii) $\left(\frac{-9}{4}\right)^{7} \times \left(\frac{8}{3}\right)^{8} \times \left(\frac{7}{4}\right)^{8}$ (iv) $\left(\frac{-9}{4}\right)^{7} \times \left(\frac{8}{3}\right)^{6} \times \left(\frac{7}{4}\right)^{6}$

(v) $\left(\frac{-9}{4}\right)^{7} \times \left(\frac{10}{3}\right)^{7} \times \left(\frac{9}{4}\right)^{7}$

12. Find the exponential notation of
$5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5$

(i) 5^{8} (ii) 5^{7} (iii) 8^{7} (iv) 5^{6} (v) 3^{7}

13. Find the exponential notation of
$-9 \times -9 \times -9$

(i) $(-9)^{3}$ (ii) $(-9)^{2}$ (iii) $(-9)^{4}$ (iv) $(-7)^{3}$ (v) $(-11)^{3}$

14. Find the exponential notation of
$-11 \times -11 \times -11 \times -11 \times -11 \times -11 \times -11 \times -11$

(i) $(-13)^{8}$ (ii) $(-11)^{7}$ (iii) $(-11)^{9}$ (iv) $(-11)^{8}$ (v) $(-8)^{8}$

15. Find the exponential notation of
$19 \times 19 \times 19$

(i) 19^{3} (ii) 16^{3} (iii) 19^{4} (iv) 19^{2} (v) 21^{3}

16. Find the exponential notation of
$\frac{8}{5} \times \frac{8}{5} \times \frac{8}{5} \times \frac{8}{5} \times \frac{8}{5} \times \frac{8}{5} \times \frac{8}{5} \times \frac{8}{5}$

(i) $\left(\frac{6}{5}\right)^{8}$ (ii) $\left(\frac{8}{5}\right)^{8}$ (iii) $\left(\frac{8}{5}\right)^{7}$ (iv) $\left(\frac{8}{5}\right)^{9}$ (v) 2^{8}

Find the exponential notation of

17. $\frac{18}{13} \times \frac{18}{13} \times \frac{18}{13}$

(i) $\left(\frac{16}{13}\right)^{3}$ (ii) $\left(\frac{18}{13}\right)^{3}$ (iii) $\left(\frac{18}{13}\right)^{4}$ (iv) $\left(\frac{20}{13}\right)^{3}$ (v) $\left(\frac{18}{13}\right)^{2}$

Find the exponential notation of

18. $(\frac{-2}{3}) \times (\frac{-2}{3}) \times (\frac{-2}{3}) \times (\frac{-2}{3}) \times (\frac{-2}{3}) \times (\frac{-2}{3}) \times (\frac{-2}{3}) \times (\frac{-2}{3})$

(i) $\left(\frac{-4}{3}\right)^{8}$ (ii) $\left(\frac{-2}{3}\right)^{9}$ (iii) $\left(\frac{-2}{3}\right)^{7}$ (iv) $\left(\frac{-2}{3}\right)^{11}$ (v) $\left(\frac{-2}{3}\right)^{8}$

Find the exponential notation of

19. $(\frac{-16}{15}) \times (\frac{-16}{15}) \times (\frac{-16}{15}) \times (\frac{-16}{15}) \times (\frac{-16}{15}) \times (\frac{-16}{15}) \times (\frac{-16}{15})$

(i) $\left(\frac{-16}{15}\right)^{7}$ (ii) $\left(\frac{-14}{15}\right)^{7}$ (iii) $\left(\frac{-16}{15}\right)^{6}$ (iv) $\left(\frac{-16}{15}\right)^{8}$ (v) $\left(\frac{-6}{5}\right)^{7}$

20. $g^4 =$

(i) $4 \times g \times g \times g \times g$ (ii) $g \times g \times g$ (iii) $g \times g \times g \times g$ (iv) $g \times g \times g \times g \times g$ (v) $-g \times g \times g \times g$

21. $j^2 k^2 =$

(i) $-2 \times j \times j \times k \times k$ (ii) $j \times k \times k$ (iii) $j \times j \times j \times k \times k$ (iv) $4 \times j \times j \times k \times k$ (v) $j \times j \times k \times k$

22. $21 m^3 n^4 o^2 =$

(i) $19 \times m \times m \times m \times n \times n \times n \times n \times o \times o$ (ii) $21 \times m \times m \times m \times n \times n \times n \times n \times o \times o$

(iii) $21 \times m \times m \times m \times m \times n \times n \times n \times n \times o \times o$ (iv) $21 \times m \times m \times n \times n \times n \times n \times o \times o$

(v) $24 \times m \times m \times m \times n \times n \times n \times n \times o \times o$

23. $18 \times j \times j \times j \times j =$

(i) $18 j^5$ (ii) $16 j^4$ (iii) $18 j^4$ (iv) $18 j^3$ (v) $21 j^4$

24. $10 \times h \times h \times i \times i =$

(i) $10 h^3 i^2$ (ii) $12 h^2 i^2$ (iii) $10 h^2 i^2$ (iv) $10 h i^2$ (v) $8 h^2 i^2$

25. $e \times e \times f \times f \times f \times g \times g =$

(i) $e^3 f^4 g^2$ (ii) $-2 e^2 f^4 g^2$ (iii) $e f^4 g^2$ (iv) $e^2 f^4 g^2$ (v) $4 e^2 f^4 g^2$

Assignment Key

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