EduSahara™ Assignment

Name : Exponents Concepts

Chapter : Exponents

Grade : ICSE Grade VII



1. The base in the term $9^6$ is

   (i) 9 (ii) 6 (iii) -9 (iv) -6

2. The exponent in the term $4^9$ is

   (i) 9 (ii) 4 (iii) 6 (iv) -9 (v) -4

3. The power in the term $8^3$ is

   (i) -3 (ii) -8 (iii) 1 (iv) 3 (v) 8

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

   (i) 7 (ii) $\frac{7}{6}$ (iii) $(\frac{-7}{6})$ (iv) $\frac{5}{6}$ (v) -7

5. The exponent in the term $\left(\frac{9}{2}\right)^2$ is

   (i) -2 (ii) $(\frac{-9}{2})$ (iii) 2 (iv) 0 (v) $\frac{9}{2}$

6. The power in the term $\left(\frac{8}{5}\right)^7$ is

   (i) 7 (ii) $(\frac{-8}{5})$ (iii) 4 (iv) -7 (v) $\frac{8}{5}$

7. The exponent in the term $\left(\frac{7}{2}\right)^3$ is

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

8. $(-2 \times -5)^5 =$

   (i) $(-2)^5 \times (-8)^5$ (ii) $(-2)^5 \times (-2)^5$ (iii) $(-2)^5 \times (-5)^5$ (iv) $(-2)^5 \times (-5)^6$ (v) $(-2)^5 \times (-5)^4$

9. $(3 \times 6 \times -7)^{8} =$

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

10. $\left(\frac{5}{1} \times \frac{-9}{1}\right)^{-6} =$

(i) $5^{-6} \times (-9)^{-6}$ (ii) $5^{-6} \times (-11)^{-6}$ (iii) $5^{-6} \times (-9)^{-7}$ (iv) $5^{-6} \times (-6)^{-6}$ (v) $5^{-6} \times (-9)^{-5}$

11. $\left(\frac{8}{7} \times \left(\frac{-7}{4}\right) \times \frac{5}{2}\right)^{-3} =$

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

(iv) $\left(\frac{8}{7}\right)^{-3} \times \left(\frac{-7}{4}\right)^{-3} \times \left(\frac{5}{2}\right)^{-3}$ (v) $\left(\frac{8}{7}\right)^{-3} \times \left(\frac{-5}{4}\right)^{-3} \times \left(\frac{7}{2}\right)^{-3}$

12. Find the exponential notation of
$6 \times 6 \times 6$

(i) $8^{3}$ (ii) $6^{4}$ (iii) $6^{2}$ (iv) $4^{3}$ (v) $6^{3}$

13. Find the exponential notation of
$-4 \times -4 \times -4 \times -4 \times -4 \times -4 \times -4$

(i) $(-4)^{8}$ (ii) $(-6)^{7}$ (iii) $(-4)^{7}$ (iv) $(-4)^{6}$ (v) $(-1)^{7}$

14. Find the exponential notation of
$-16 \times -16 \times -16 \times -16$

(i) $(-16)^{4}$ (ii) $(-16)^{5}$ (iii) $(-16)^{3}$ (iv) $(-14)^{4}$ (v) $(-18)^{4}$

15. Find the exponential notation of
$17 \times 17 \times 17 \times 17 \times 17 \times 17 \times 17 \times 17$

(i) $14^{8}$ (ii) $17^{7}$ (iii) $19^{8}$ (iv) $17^{9}$ (v) $17^{8}$

16. Find the exponential notation of
$\frac{7}{3} \times \frac{7}{3} \times \frac{7}{3}$

(i) $\left(\frac{7}{3}\right)^{4}$ (ii) $3^{3}$ (iii) $\left(\frac{7}{3}\right)^{2}$ (iv) $\left(\frac{5}{3}\right)^{3}$ (v) $\left(\frac{7}{3}\right)^{3}$

Find the exponential notation of

17. $\frac{15}{13} \times \frac{15}{13} \times \frac{15}{13} \times \frac{15}{13}$

(i) 1 (ii) $\left(\frac{15}{13}\right)^{3}$ (iii) $\left(\frac{15}{13}\right)^{5}$ (iv) $\left(\frac{15}{13}\right)^{4}$ (v) $\left(\frac{17}{13}\right)^{4}$

Find the exponential notation of

18. $\left(\frac{-9}{5}\right) \times \left(\frac{-9}{5}\right) \times \left(\frac{-9}{5}\right) \times \left(\frac{-9}{5}\right) \times \left(\frac{-9}{5}\right) \times \left(\frac{-9}{5}\right)$

(i) $\left(\frac{-9}{5}\right)^{5}$ (ii) $\left(\frac{-11}{5}\right)^{6}$ (iii) $\left(\frac{-7}{5}\right)^{6}$ (iv) $\left(\frac{-9}{5}\right)^{7}$ (v) $\left(\frac{-9}{5}\right)^{6}$

Find the exponential notation of

19. $\left(\frac{-17}{19}\right) \times \left(\frac{-17}{19}\right) \times \left(\frac{-17}{19}\right) \times \left(\frac{-17}{19}\right) \times \left(\frac{-17}{19}\right) \times \left(\frac{-17}{19}\right) \times \left(\frac{-17}{19}\right)$

(i) $\left(\frac{-17}{19}\right)^{9}$ (ii) $\left(\frac{-17}{19}\right)^{7}$ (iii) $\left(\frac{-17}{19}\right)^{8}$ (iv) $(-1)^{8}$ (v) $\left(\frac{-15}{19}\right)^{8}$

20. $27m^3 =$

(i) $24 \times m \times m \times m$ (ii) $27 \times m \times m \times m \times m$ (iii) $27 \times m \times m$ (iv) $27 \times m \times m \times m$ (v) $30 \times m \times m \times m$

21. $19f^2g^4 =$

(i) $22 \times f \times f \times g \times g \times g \times g$ (ii) $19 \times f \times f \times g \times g \times g \times g$ (iii) $19 \times f \times f \times f \times g \times g \times g \times g$ (iv) $19 \times f \times g \times g \times g \times g$

(v) $17 \times f \times f \times g \times g \times g \times g$

22. $22c^2d^3e^2 =$

(i) $22 \times c \times d \times d \times d \times e \times e$ (ii) $22 \times c \times c \times c \times d \times d \times d \times e \times e$ (iii) $22 \times c \times c \times d \times d \times d \times e \times e$

(iv) $19 \times c \times c \times d \times d \times d \times e \times e$ (v) $24 \times c \times c \times d \times d \times d \times e \times e$

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

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

24. $17 \times f \times f \times f \times f \times g \times g \times g \times g =$

(i) $17f^4g^4$ (ii) $17f^3g^4$ (iii) $20f^4g^4$ (iv) $17f^5g^4$ (v) $14f^4g^4$

25. $8 \times p \times p \times p \times p \times q \times q \times q \times r \times r \times r \times r =$

(i) $8p^3q^3r^4$ (ii) $5p^4q^3r^4$ (iii) $8p^5q^3r^4$ (iv) $10p^4q^3r^4$ (v) $8p^4q^3r^4$

## Assignment Key

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