EduSahara™ Assignment

Name : Miscellaneous Problems on Exponents

Chapter : Exponents

Grade : ICSE Grade VII

1. $\left(\frac{8}{7}\right)^{4}$ =

(i) $\frac{8^4}{4^4}$ (ii) $\frac{8^4}{10^4}$ (iii) $\frac{8^3}{7^4}$ (iv) $\frac{8^4}{7^4}$ (v) $\frac{8^5}{7^4}$

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

(i) $\frac{(-3)^{-6}}{8^{-7}}$ (ii) $\frac{(-3)^{-8}}{8^{-7}}$ (iii) $\frac{(-3)^{-7}}{11^{-7}}$ (iv) $\frac{(-3)^{-7}}{6^{-7}}$ (v) $\frac{(-3)^{-7}}{8^{-7}}$

3. $(-7)^{7}$ =

(i) $\left(\frac{-1}{7}\right)^{-8}$ (ii) $\left(\frac{1}{7}\right)^{-7}$ (iii) $\left(\frac{-3}{7}\right)^{-7}$ (iv) $\left(\frac{-1}{7}\right)^{-6}$ (v) $\left(\frac{-1}{7}\right)^{-7}$

4. $(-6)^{-6}$ =

(i) $\left(\frac{1}{6}\right)^{6}$ (ii) $\left(\frac{-1}{6}\right)^{6}$ (iii) $\left(\frac{-1}{6}\right)^{5}$ (iv) $\left(\frac{-1}{6}\right)^{7}$ (v) $\left(\frac{-1}{2}\right)^{6}$

5. $(-5)^{4}$ =

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

6. $\frac{(-4)^{-6}}{(-4)^{5}}$ =

(i) $(-4)^{-10}$ (ii) $(-6)^{-11}$ (iii) $(-1)^{-11}$ (iv) $(-4)^{-12}$ (v) $(-4)^{-11}$

$\left(\frac{-5}{8}\right)^{-2}$

7. $\frac{\quad}{9} = \left(\frac{-5}{8}\right)$

(i) $\left(\frac{-5}{8}\right)^{-12}$ (ii) $\left(\frac{-7}{8}\right)^{-11}$ (iii) $\left(\frac{-3}{8}\right)^{-11}$ (iv) $\left(\frac{-5}{8}\right)^{-11}$ (v) $\left(\frac{-5}{8}\right)^{-10}$

8. $[(-6)^{-2}]^{-5} =$

(i) $(-6)^{9}$ (ii) $(-4)^{10}$ (iii) $(-6)^{10}$ (iv) $(-6)^{11}$ (v) $(-8)^{10}$

9. $\left[\left(\frac{-3}{4}\right)_{5}\right]^{-3} =$

(i) $\left(\frac{9}{4}\right)_{7}$ (ii) $\left(\frac{13}{6}\right)_{5}$ (iii) $\left(\frac{9}{4}\right)_{2}$ (iv) $\left(\frac{9}{4}\right)_{5}$ (v) $\left(\frac{5}{2}\right)_{5}$

10. $\left[\left(\frac{9}{7}\right)^{4}\right]^{5} =$

(i) $\left(\frac{9}{7}\right)^{19}$ (ii) 1 (iii) $\left(\frac{9}{7}\right)^{20}$ (iv) $\left(\frac{11}{7}\right)^{20}$ (v) $\left(\frac{9}{7}\right)^{21}$

11. Find the exponential notation of $\left(\frac{-1}{4}\right)$

(i) $\frac{-1\times0}{2^2}$ (ii) $\frac{-1\times1}{5^2}$ (iii) $\frac{-1\times1}{2^2}$ (iv) $\frac{(-1)^2\times1}{2^2}$ (v) $\frac{-1\times1}{(-1)^2}$

12. Find the exponential notation of $\frac{200}{9}$

(i) $\frac{2^3\times5^2}{0}$ (ii) $\frac{2^3\times5^2}{6^2}$ (iii) $\frac{2^2\times5^2}{3^2}$ (iv) $\frac{2^3\times5^2}{3^2}$ (v) $\frac{2^4\times5^2}{3^2}$

13. Find the exponential notation of $\left(\frac{-75}{4}\right)$

(i) $\frac{-1\times3\times5^2}{2^2}$ (ii) $\frac{-1\times3\times5^2}{4^2}$ (iii) $\frac{-1\times3\times5^2}{(-1)^2}$ (iv) $\frac{(-1)^2\times3\times5^2}{2^2}$ (v) $\frac{-2\times3\times5^2}{2^2}$

14. Find the exponential notation of $\frac{9}{4}$

(i) $\left(\frac{1}{2}\right)^2$ (ii) $\left(\frac{3}{2}\right)^2$ (iii) $\frac{3}{2}$ (iv) $\left(\frac{3}{2}\right)^3$ (v) $\left(\frac{5}{2}\right)^2$

15. Find the exponential notation of $\left(\frac{-1}{28}\right)$

(i) $\frac{-1\times1}{2^2\times5}$ (ii) $\frac{-1\times1}{2^2\times7}$ (iii) $\frac{-1\times2}{2^2\times7}$ (iv) $\frac{-1\times0}{2^2\times7}$ (v) $\frac{-1\times1}{5^2\times7}$

16. Find the exponential notation of $\frac{108}{7}$

(i) $\frac{2^2\times3^3}{7}$ (ii) $\frac{2^2\times3^3}{10}$ (iii) $\frac{2^2\times3^3}{4}$ (iv) $\frac{2^3\times3^3}{7}$ (v) $\frac{2\times3^3}{7}$

17. Find the exponential notation of $\left(\frac{-49}{6}\right)$

(i) $\frac{-1\times7^2}{5\times3}$ (ii) $\frac{(-1)^2\times7^2}{2\times3}$ (iii) $\frac{-1\times7^2}{2\times3}$ (iv) $\frac{-2\times7^2}{2\times3}$ (v) $\frac{-1\times7^2}{-1\times3}$

18. Find the exponential notation of $\left(\frac{-3}{196}\right)$

(i) $\frac{(-1)^2\times3}{2^2\times7^2}$ (ii) $\frac{-1\times3}{5^2\times7^2}$ (iii) $\frac{-1\times3}{2^2\times7^2}$ (iv) $\frac{-2\times3}{2^2\times7^2}$ (v) $\frac{-1\times3}{2^{-1}\times7^2}$

Assignment Key

1) (iv)	2) (v)	3) (v)	4) (ii)	5) (i)	6) (v)
7) (iv)	8) (iii)	9) (iv)	10) (iii)	11) (iii)	12) (iv)
13) (i)	14) (ii)	15) (ii)	16) (i)	17) (iii)	18) (iii)