EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Real Numbers

Grade : SSC Grade X

1. Find the LCM of $\{140,80,90,70\}$

   (i) 5040 (ii) 5039 (iii) 5042 (iv) 5037 (v) 5041

2. $log\,58 + log\,43 =$

   (i) $log\,2494^2$ (ii) $log\,2497$ (iii) $log\,2494$ (iv) $log\,2492$ (v) $log\,2493$

3. Simplify the expression $\left(\frac{4}{3}\right)^{(7/6)} \times \left(\frac{4}{3}\right)^{(7/6)}$

   (i) $2^{\left(\frac{7}{3}\right)}$ (ii) $\left(\frac{2}{3}\right)^{(7/3)}$ (iii) $\left(\frac{4}{3}\right)^{3}$ (iv) $\left(\frac{4}{3}\right)^{(7/3)}$ (v) $\left(\frac{4}{3}\right)^{(11/5)}$

4. Find the exponential notation of
   $18 \times 18 \times 18 \times 18 \times 18 \times 18 \times 18 \times 18$

   (i) 18^7 (ii) 18^9 (iii) 20^8 (iv) 18^8 (v) 15^8

5. Find the total number of factors of 14

   (i) 1 (ii) 5 (iii) 6 (iv) 3 (v) 4

6. The base of $log_5 57$ is

   (i) 4 (ii) 8 (iii) 3 (iv) 57 (v) 5

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

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

8. $log\,0.1852 - log\,0.8182 =$

   (i) $log\,0.2263$ (ii) $log\,7.2263$ (iii) $log\,8.2263$ (iv) $log\,1.2263$ (v) $log\,2.2263$

9. $log\ \frac{4}{19} - log\ \frac{3}{4} =$

(i) $log\left(\frac{16}{57}\right)^2$ (ii) $log\ \frac{6}{19}$ (iii) $log\ \frac{16}{57}$ (iv) $log\ \frac{16}{55}$ (v) $log\ \frac{14}{57}$

10. Find the period of the recurring decimal $30.\overline{962}$

(i) 9620 (ii) 3 (iii) 962 (iv) 96 (v) 4

11. $log\ 66 - log\ 76 =$

(i) $log\ \frac{31}{38}$ (ii) $log\ \frac{35}{38}$ (iii) $log\left(\frac{33}{38}\right)^2$ (iv) $log\ \frac{11}{12}$ (v) $log\ \frac{33}{38}$

12. $log\ 80.9100 - log\ 57.6300 =$

(i) $log\ 3.4040$ (ii) $log\ 1.4040$ (iii) $log\ 2.4040$ (iv) $log\ 9.4040$ (v) $log\ 0.4040$

13. $log_9\ \frac{2}{5} =$

(i) $log\ \frac{2}{5} + log\ 9$ (ii) $log\ \frac{2}{5} - log\ 9$ (iii) $log\ 9 \div log\ \frac{2}{5}$ (iv) $log\ \frac{2}{5} \times log\ 9$ (v) $log\ \frac{2}{5} \div log\ 9$

14. Simplify the expression $2^{\left(\frac{3}{2}\right)} \times 2^{\left(\frac{3}{2}\right)}$

(i) 5^3 (ii) $(-1)^3$ (iii) 2^3 (iv) 2^2 (v) 2^4

15. Find the product of LCM and HCF of $\{6,27\}$

(i) 160 (ii) 165 (iii) 162 (iv) 163 (v) 161

16. Express $\frac{627}{1000}$ as a decimal correct to 3 decimal places

(i) 0.627 (ii) 6.27 (iii) 0.727 (iv) 0.063 (v) 0.427

17. $log\ 0.4659 + log\ 0.9677 =$

(i) $log\ 1.4509$ (ii) $log\ 7.4509$ (iii) $log\ 8.4509$ (iv) $log\ 0.4509$ (v) $log\ 2.4509$

18. Convert the non-terminating recurring decimal $27.22222222222222...$ to rational number

(i) 27 (ii) $\frac{245}{11}$ (iii) $\frac{247}{9}$ (iv) 35 (v) $\frac{245}{9}$

19. Find the total number of factors of 60

(i) 11 (ii) 10 (iii) 12 (iv) 14 (v) 13

20. $log_{36} 216 =$

(i) 1.5 (ii) 9.5 (iii) 2.5 (iv) 0.5 (v) 3.5

21. $log_2 73 =$

(i) $log\,73 \times log\,2$ (ii) $log\,73 - log\,2$ (iii) $log\,73 \div log\,2$ (iv) $log\,73 + log\,2$ (v) $log\,2 \div log\,73$

Find the exponential notation of

22. $(\frac{-7}{3}) \times (\frac{-7}{3}) \times (\frac{-7}{3}) \times (\frac{-7}{3})$

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

23. $log\,8^5 + log\,8^{10} =$

(i) $log\,8^{15}$ (ii) $log\,8^{14}$ (iii) $log\,10^{15}$ (iv) $log\,5^{15}$ (v) $log\,8^{16}$

24. $log_{9.05} 25.6100 =$

(i) $log\,25.6100 + log\,9.05$ (ii) $log\,25.6100 \times log\,9.05$ (iii) $log\,25.6100 - log\,9.05$ (iv) $log\,9.05 \div log\,25.6100$

(v) $log\,25.6100 \div log\,9.05$

25. Simplify the expression $\left(\frac{-5}{8}\right)_3 \times \left(\frac{-5}{8}\right)_3$

(i) $\left(\frac{-5}{4}\right)_5$ (ii) $\left(\frac{-5}{6}\right)_3$ (iii) 1 (iv) $\left(\frac{-5}{2}\right)_3$ (v) $\left(\frac{-5}{4}\right)_3$

Assignment Key

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