

Logarithm

Exercise 3.4 for Class IX

Q1. Use log tables to find the values of

i. 0.8176×13.64

ii. $(789.5)^{\frac{1}{8}}$

iii. $\frac{0.678 \times 9.01}{0.0234}$

iv. $\sqrt[5]{2.709} \times \sqrt[7]{1.2}$

v. $\frac{(1.23)(0.6975)}{(0.0075)(1278)}$

vi. $\sqrt[3]{\frac{0.7214 \times 20.37}{60.8}}$

vii. $\frac{83 \times \sqrt[3]{92}}{127 \times \sqrt[5]{246}}$

viii. $\frac{(438)^3 \times \sqrt{0.056}}{388^4}$

Q2. A gas is expanding according to the law $PV^n = C$. Find C when $P=80$, $V=3.1$ and $n = \frac{5}{4}$.

Q3. The formula $p = 90(5)^{-\frac{q}{10}}$ applies to the demand of a product, where 'q' is the number of units and p is the price the price units and p is the price of one unit. How many units will be demanded if the price is Rs. 18.00?

Q4. If $A = \pi r^2$ find A, when $\pi = \frac{22}{7}$ and $r = 15$.

Q5. If $v = \frac{1}{3} \pi r^2 h$, find v when $\pi = \frac{22}{7}$, $r = 2.5$ and $h = 4.2$.