

Multiplication and Division Using Logarithms

Turning Products into Addition and Quotients into Subtraction

Use logarithm and antilogarithm tables to evaluate every expression below. Do not use a calculator. Show the characteristic and mantissa for each number, then combine the logs before taking the antilogarithm.

Section A — Exercises

1. Evaluate $(38.32 \times 2.964) \div 6.285$
2. Evaluate 526.3×4.812
3. Evaluate $738.2 \div 24.61$
4. Evaluate $(52.14 \times 6.038) \div 9.472$
5. Evaluate $(7.925 \times 318.6) \div (4.216 \times 2.983)$
6. Evaluate $89.47 \div 13.26$

Tip for questions with more than one number on top or bottom (like Q5): add the logs of all the numerators, add the logs of all the denominators, then subtract the second sum from the first before taking the antilogarithm.

Answers

Q1	18.07	Q2	2533
Q3	30.00	Q4	33.24
Q5	200.8	Q6	6.747