

Log Activity

Calculate the following values using your calculator, and compare the answer of the left hand column with the corresponding answer in the right-hand column.

1) $\log 15 =$

$\log 5 + \log 3 =$

2) $\log 36 =$

$\log 9 + \log 4 =$

3) $\log 56 =$

$\log 7 + \log 8 =$

What property is illustrated in #1-3? _____

4) $\log 3 =$

$\log 12 - \log 4 =$

5) $\log 7 =$

$\log 42 - \log 6 =$

6) $\log 6 =$

$\log 30 - \log 5 =$

What property is illustrated in #4-6? _____

7) $\log 25 =$

$2\log 5 =$

8) $\log 32 =$

$5\log 2 =$

9) $\log 3 =$

$\left(\frac{1}{3}\right)\log 27 =$

What property is illustrated in #7-9? _____

10) $\log 1000 = x$

$10^x = 1000$

11) $\log(0.00001) = x$

$10^x = 0.00001$

12) $\ln(e^3) = x$

$\ln(e^{-5}) = x$

What property is illustrated in #10-12? _____