Congratulations! You passed!

TO PASS 75% or higher

Keep Learning

GRADE
100%

Practice quiz on Exponents and Logarithms

TOTAL POINTS 12

Congratulations! You passed!

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Graded quiz on Tangent Lines to Functions, Exponents and Logarithms

LATEST SUBMISSION GRADE

76.92%

2. A light-year (the distance light travels in a vacuum in one year) is $9,460$ trillion meters. Express in scientific notation.

0 / 1 point

- (●) 9.46×10^{15} kilometers
- ( ) 0.946×10^{16}
- ( ) 9460×10^{12} meters
- ( ) 9.46×10^{15} meters.

! **Incorrect**

$9,460$ is (9.4×10^3) meters and one trillion meters is 10^{12} meters.
$(9.4 \times 10^3)(10^{12}) = 9.4 \times 10^{15}$. A kilometer is 1000 meters.

7. Simplify $\log_{10} 1000 + \log_{10} \frac{1}{10000}$

0 / 1 point

- (●) $\frac{1}{10}$
- ( ) $\log_{10} -10$
- ( ) -1
- ( ) 1

! **Incorrect**

By the Product Rule, this is:

$$\log_{10}\left(\frac{1000}{10000}\right) = \log_{10}\left(\frac{1}{10}\right) = ?$$

Don't give up! Try reworking the problem!

9. If $\log_{10} b = 1.8$ and $log_a b = 2.5752$, what is a?

0 / 1 point

- 6
- 3
- 4
- 5

! **Incorrect**

To solve for a in the formula;

$$\log_a b = \frac{\log_x b}{\log_x a}$$

$\log_a b = 2.5752$ and $\log_{10} b = 1.8$