

Daily Agenda

Learning Target: I can define a logarithm
I can rewrite between exponential and log form
I can solve a log equation without a calculator

Homework
Worksheet

Assessments
Unit 7 Test 2/1

It's what you learn after you know it all that counts.
-John Wooden

Staple and turn in WS #1-4

Nov 15-8:24 PM

Solve for x, correct to 3 decimal places.

$$2^x = 12$$

$$x = 3.585$$

$$2^3 = 8$$

$$2^4 = 16$$

Jan 19-11:04 AM

7.2 Introduction to Logs

A log is an exponent

$$y = \log_a x \quad a^y = x$$

- y is the exponent (logarithm)
- a is the base
- x is the argument

Sep 15-10:27 PM

Rewrite into exponential form

$$\log_2 2 = 1$$

$$2^1 = 2$$

$$\log_3 9 = 2$$

$$3^2 = 9$$

$$\log_2 \frac{1}{16} = -4$$

$$2^{-4} = \frac{1}{16}$$

Oct 25-11:44 AM

Rewrite into log form

$$3^5 = 243$$

$$2^{-4} = \frac{1}{16}$$

$$5^0 = 1$$

$$\log_3 243 = 5$$

$$\log_2 \frac{1}{16} = -4$$

$$\log_5 1 = 0$$

Oct 25-11:44 AM

Solve for x

$$\log_3 \frac{1}{81} = x$$

$$3^x = \frac{1}{81}$$

$$3^x = 3^{-4}$$

$$x = -4$$

$$\log_2 x = -4$$

$$2^{-4} = x$$

$$\frac{1}{16} = x$$

$$\log_x 8 = \frac{1}{2}$$

$$\left(x^{\frac{1}{2}}\right)^2 = 8^2$$

$$x = 64$$

Oct 25-11:44 AM