38 Logarithmic Equations

Due:
12/15/2015 at 06:00am EST.

Students will be able to:

- Solve logarithmic equations
- Use properties of logarithms to solve logarithmic equations

Functions and symbols that WeBWorK understands.

Links to some useful WeBWorK pages for students

1. (1 pt) Solve the following equation
$\log_3(x-4)+\log_3(x-3)=3$
$x=$_____
Note: If there is more than one solution, wrtie your solutions in a comma seperated list

2. (1 pt) Solve the equation
$\log_4(x-5)+\log_4(x-4)=1$
$x=$ _____
If there is more than one solution, present your solutions in a comma separated list.

3. (1 pt) Solve the equation: $\log_4(x^2-3x-4)=4$
$x=$ _____
If there is more than one solution, enter your solutions as a comma separated list.

4. (1 pt) Solve the equation
$\log(3x+2)=2$
Your answer is
$x=$ _____

5. (1 pt) Find the solution of the logarithmic equation

$$6-\ln(4-x)=0$$

Your answer is
$x=$ _____

6. (1 pt) Solve the equation
$\log_2(x^2+5x-32)=2$
$x=$ _____
If there is more than one solution, enter your solutions as a comma separated list.

7. (1 pt) Solve the equation: $\log x+\log(x-18)=\log(9x)$
$x=$ _____

8. (1 pt) Solve the equation: $\ln(x+9)+\ln(x-9)=0$
$x=$ _____

9. (1 pt) For what value of x is the following true?

$$\log(x+11)=\log x+\log 11$$

$x=$ _____