Solving Logarithmic Equations ... Set 2

SOLVING LOGARITHMIC EQUATIONS

Directions: Solve each logarithmic equation. Remember to check for extraneous solutions!

1.)
$$\log(5x) = \log(2x + 9)$$

2.)
$$\log(10 - 4x) = \log(10 - 3x)$$

3.)
$$log(4p-2) = log(-5p+5)$$

4.)
$$\log(4k-5) = \log(2k-1)$$

5.)
$$\log(-2a + 9) = \log(7 - 4a)$$

6.)
$$2\log_7(-2r) = 0$$

7.)
$$-10 + \log_3(n+3) = -10$$

8.)
$$-2\log_5(7x) = 2$$

9.)
$$\log(-m) + 2 = 4$$

10.)
$$-6\log_3(x-3) = -24$$

11.)
$$\log_{12}(v^2 + 35) = \log_{12}(-12v - 1)$$

11.)
$$\log_{12}(v^2 + 35) = \log_{12}(-12v - 1)$$
 12.) $\log_{9}(-11x + 2) = \log_{9}(x^2 + 30)$