

HW 4 - Solving Logs Continued

Solve each equation.

1) $\ln(2v - 10) = \ln(4v - 8)$

2) $\ln(4x + 5) = \ln(2x + 4)$

3) $\ln -m = \ln(4m + 5)$

4) $-3 + \ln -3n = -2$

5) $8 \ln 3x = 16$

6) $-6 \log_4(5x + 8) = -18$

7) $-e^{k-10} = -67$

8) $e^{9n-3} - 9 = 5$

9) $\ln(x - 4) - \ln 4 = 5$

10) $\ln 2x - \ln 9 = \ln 42$

$$11) 10e^r = 36$$

$$12) -e^a = -14$$

Solve each equation.

$$13) \log(b - 2) = \log(-3b + 2)$$

$$14) \log_{19}(5p - 2) = \log_{19}(-p + 4)$$

$$15) \log_2(b^2 + 28) = \log_2(-11b - 2)$$

$$16) -10 \log m = 10$$

$$17) \log_4(x - 4) = 2$$

$$18) 15^{7m} = 71$$

$$19) 17^{n+9} = 13$$

$$20) \log 8 - \log(x - 5) = 1$$

$$21) \log_4 x - \log_4(x - 5) = 2$$

$$22) \log_3 x - \log_3(x - 6) = 3$$