Solving Equations

Emphasis solving Logarithmic Equations

Solve each of the following Logarithmic Equations:

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. $-2\log_5(7x) = 0$
9. $\log(-m) + 2 = 4$	10. $-6\log_3(x - 3) = -24$

11. $\log_{12}(v^2 + 35) = \log_{12}(-12v - 1)$	12. $\log_9(-11x + 2) = \log_9(x^2 + 30)$
13. $\log(16 + 2b) = \log(b^2 - 4b)$	14. $\ln(n^2 + 12) = \ln(-9n - 2)$
15. $\log x + \log 8 = 2$	16. $\log x - \log 2 = 1$
17. $\log 2 + \log x = 1$	18. $\log x + \log 7 = \log 37$
19. $\ln 2 - \ln(3x + 2) = 1$	20. $\ln -3x - 1) - \ln 7 = 2$