Algebra II Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lesson 8-6 Natural Logarithms Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour\_\_\_

Homework #6

Write each expression as a single natural logarithm.

1) 3ln 5 2) ln 9 + ln 2 3) ln 24 - ln 6

4)4ln 8 + ln 10 5.ln 3 - 5ln 3 6)2ln 8 - 3ln 4

**Solve each equation. Check your answers.**

7) ln 3*x* = 6 8) ln *x* = -2

9)ln (4*x* - l) = 36 10)ln (2*m* + 3) = 8

**Use natural logarithms to solve each equation.**

11) *ex* = 18 12) *e*2*x* = 10

13) *ex* + 1 = 30 14) *e*2*x* = 12

15) An initial deposit of $200 is now worth $331.07.The account earns

8.4% interest, compounded continuously. Determine how long the money has

been in the account.