

Practice**Natural Logarithms****Evaluate each expression.**

1. $\ln 71$

2. $\ln 8.76$

3. $\ln 0.532$

4. $\operatorname{antiln} -0.256$

5. $\operatorname{antiln} 4.62$

6. $\operatorname{antiln} -1.62$

Convert each logarithm to a natural logarithm and evaluate.

7. $\log_7 94$

8. $\log_5 256$

9. $\log_9 0.712$

Use natural logarithms to solve each equation or inequality.

10. $6^x = 42$

11. $7^x = 4^{x+3}$

12. $1249 = 175e^{-0.04t}$

13. $10^{x+1} > 3^x$

14. $12 < e^{0.048y}$

15. $8.4 < e^{t-2}$

- 16. Banking** Ms. Cubbatz invested a sum of money in a certificate of deposit that earns 8% interest compounded continuously. The formula for calculating interest that is compounded continuously is $A = Pe^{rt}$. If Ms. Cubbatz made the investment on January 1, 1995, and the account was worth \$12,000 on January 1, 1999, what was the original amount in the account?