

N: _____

D: _____ P: 0 1 2 3 4 5 6

Algebra 2 // Topic 6 // Natural Logs A

D: Solve the following equations for x. Recall: ln is simply \log_e

▼ Evaluate the following expressions. (Express as a single number)

1. $\ln e$

2. $\ln e^2$

3. $\ln 1$

4. $\ln e^3 + 1$

5. $\ln e + \ln e^4$

▼ Expand the following expressions

6. $\ln\left(\frac{4ab}{c}\right)$

7. $\ln(ab^3c)$

8. $\ln\sqrt{a^3b}$

▼ Condense the following expressions

9. $\frac{1}{2}\ln 2 + \frac{1}{2}\ln x - 3\ln y$

10. $3\ln x - 5\ln y$

11. $2\ln x - (3\ln a + 4\ln b)$

▼ Solve for x

12. $e^x \cdot e^{3x} = 15$

13. $4(e^x) = 28$

14. $\frac{1}{2}e^x = 2$

15. $\ln x = 5$

16. $5\ln x - 4 = 1$

17. $3\ln(x+1) = 6$