1. Solve \( \log_7(x + 5) - \log_7(x - 1) = 2 \).

2. Solve \( \log_2(x^2) - \log_2(3x - 8) = 2 \).

3. Solve \( 16^x = 45 \).

4. Solve \( 10^{\sin x} = 1 \).

5. Solve \( 2\ln(x + 1) - 1 = 0 \).
6. Solve \(2 \ln x = 4\).

7. Solve \(e^{(x^2 + 2x - 3)} = 1\)

8. Solve \(\log_2(3 - x) = 3\).

9. Solve \(3^{(1 - 2x)} = 27\).

10. Solve \(\log_4(3x) = \frac{1}{2}\).

11. Solve \(4 \cdot 16^{-3x} = 16^{3x-2}\).

12. Solve \(e^{x-1} - 5 = 5\).
13. Solve \( e^{x+1} = 5^{x+1} \).

14. Solve \( e^{x+1} = 2 \cdot 3^{x-2} \).

15. Solve \( 2 \ln x = \ln (4x + 6) - \ln 2 \).

16. Solve \( \ln (2x - 1) + \ln (3x - 2) = \ln 7 \).
17. Solve $e^{2x} + (e^x - 1)^2 = 1$.

18. Solve $4 \log_{10} (x + 3) \cdot \log_{10} (x^2) + 1 = 0$

19. Graph $\ln x$ and $\log_2 x$.

20. What’s the relationship between the graphs of $f(x) = \log_3 x$ and $g(x) = 3^x$?

21. Graph $g(x) = 4 \ln(x - 2)$. Label 4 points on this graph.

22. Graph $f(x) = \log_5(x) + 5$. Label 4 points on this graph. Does it have any asymptotes?