

Exponential and Log Equations

Solve

1. $3^{2x-1} = 5^{x+7}$

2. $2^{x-1} = 23 \cdot 6^{3x}$

3. $\log_7 x = 3$

4. $\log_x 5 = 4$

5. $\log_3 8 = x$

6. $\log x + \log(x+1) = \log 6$

7. $\log_3 x + 4\log_3 x = \log_3 1024$

8. $\log_5(x^3 - 256) - \log_5(x^2 + 4x + 64) = \log_5 3$

9. $\log(x^2 + 8x + 7) - \log(x + 7) = \log 2$

10. $\log_3 x + \log_3 7 = 4$

11. $\log_2(x-1) + \log_2(x+2) = 3$

12. $4\log_4 x - 2\log_4 x = \log_4 28 - \log_4 7$

13. $\log_3 x + \log_2 5 = \log_7 12$

14. $\log_3 x + \log_4 6 = \log_2 x - \log_5 3$