

Log Equations

1. $\log_3 27 = x$

20. $\frac{1}{2} \log(x-1) = \log 5$

2. $\log_6 n = 2$

21. $\frac{1}{3} \log x + \frac{2}{3} \log x = \log 8$

3. $\log_x 81 = 3$

22. $\log_6(x+3) + \log_6(x-2) = 1$

4. $\log_x 64 = 2$

24. $2 \log(x+5) = \log 4$

5. $\log_3(x+1) = 2$

25. $3 \log(n-2) = \log 8$

6. $\log_5(2m+3) = -1$

26. $\log x + \log 16 = \log 48$

7. $\log 65 + \log 3 = \log n$

27. $[\log 3 + \log x] - \log 5 = \log 2$

8. $\log(2x-1) + \log(x+1) = \log 2$

28. $3 \log_4 x - \log_4 x = 2$

9. $\log(n+1) + \log 5 = \log 30$

29. $\log N = \frac{1}{2} [\log 3 - \log 15 - \log 7] - \frac{1}{3} \log 6$

10. $\log_2(n+2) + \log_2 n = \log_2 3$

30. $\log_6 x + \log_6 4 = 2$

11. $\log_2 5 + \log_2 N = 3$

31. $\log N = \log_3 6 + \log_4 12 - \log_2 9$

12. $\log_2 k + \log_2(k-2) = 3$

32. $\log_3(x^3 - 1) - \log_3(x-1) = 1$

13. $\log 3 + \log(4-5x) + \log 2 = 0$

33. $\log_5 N = \frac{1}{4} [\log_5 5 - \log_5 3] + \frac{1}{3} [\log_5 2 + \log_5 7]$

14. $\log 12 + \log(x+5) = \log(x+5)^2$

34. $\log_3 5 = \log_2 N$

15. $\log n - \log(n-1) = \log 3$

16. $\log(a+1) - \log a = \log 6$

17. $\log_2 32 - \log_2 x = 1$

18. $\log a - \log(a-1) = 2$

19. $\log_3 5 - \log_3(x+1) = 0$