
Resolver las siguientes ecuaciones logaritmicas.

1. $\log_3 (x - 4) = 2$

2. $\log_2 (x - 5) = 4$

3. $\log_{10} (2x + 50) = 2$

4. $\log_9 (x) = \frac{3}{2}$

5. $\log_6 (2x - 3) = \log_6 12 - \log_6 3$

6. $\log_4 (3x + 2) = \log_4 5 + \log_4 3$

7. $2 \log_3 x = 4 \log_3 8$

8. $3 \log x = 3 \log 5$

9. $\ln (-4 - x) + \ln 3 = \ln (2 - x)$

10. $\ln x + \ln (x + 4) = \ln 15 + \ln 3$

11. $\log_4 (x) = \frac{-3}{2}$

12. $\log_5 (x^2) = -2$

13. $\log_{10} (x^2) = -4$

14. $\log_6 (2x - 3) = \log_6 12 - \log_6 3$

15. $\log_3 (4x - 5) = \log_3 (2x + 1)$

16. $\log (5x^2 - 14x + 1) = \log (4x^2 - 4x - 20)$

17. $2 \log_3 (x) = 3 \log_3 5$

18. $\log_5 (2x + 3) = \log_5 11 + \log_5 3$

19. $\log_3 (2x - 3) + \log_3 (x + 3) = 4$
20. $\log_2 (16x) - \log_2 (x + 1) = 3\log_2 4$
21. $\log_5 (x) + \log_5 (x + 2) = \frac{1}{2}\log_5 9$
22. $\log_{10} (x^2) = \log_{10} (x)$
23. $\frac{1}{2}\log_5 (x - 2) = 4\log_5 2 - \frac{3}{2}\log_5 (x - 2)$
24. $\log_2 (x + 1) = 3 - \log_2 (x - 1)$
25. $\log_2 x + \log_2 (x - 2) = 3$
26. $\log_4 (x) - 3\log_4 2 = \log_4 5$
27. $\log_3 (7 - x) - \log_3 (1 - x) = 1$
28. $\log_5 (x + 12) = \log_5 x + 2$
29. $\log_3 (x + 4) + \log_3 (x - 2) = 3$
30. $\log_2 (x - 1) + \log_2 (x + 2) = 2$
31. $\log_3 (x + 2) + \log_3 (x + 4) = 1$
32. $\log (2x + 4) - \log (x - 1) = 1$
33. $\log (3x + 1) - \log (x - 3) = 3$
34. $\log (x) + \log (x - 9) = 1$
35. $\log (x + 2) - \log (4x + 3) + \log x = 0$
36. $\log (3x + 5) + \log (x + 5) = 3$
37. $\log (x + 2) + \log (x - 1) = 1$
38. $\frac{\log (35 - x^3)}{\log (5 - x)} = 3$
39. $\log (x + 6) - \frac{1}{2}\log (2x - 3) = 2 - \log 25$
40. $\log \left(\frac{1}{2} + x\right) = \log \frac{1}{2} - \log x$