

Precalculus
3.4 HW Odd Answers

1. 0

3. M

5. $\log_a M + \log_a N$

7. $\log_a M^r$

9. 7 (Hint: Change-of-Base Formula)

11. False. The difference of two logs is equal to *one* log of the quotient of their arguments, not the quotient of two logs. There should only be one log on the right side of the equation:

$$\ln(x+3) - \ln(2x) = \ln\left(\frac{x+3}{2x}\right)$$

13. 71

15. 7

17. 2

19. 3

21. $a+b$

23. $3a$

25. 2.771

27. 0.431

29. $2 + 3\log_5 x + \log_5 y + 4\log_5 z$

31. $\ln(x) - x$

33. $\log_4 x - 3\log_4 y$

35. $9\log_9 u + 3\log_9 v$

37. $\frac{1}{3}\ln(x-2) + \frac{1}{3}\ln(x+1) - \frac{2}{3}\ln(x+4)$

39. $\log_6(x^5 y^7)$

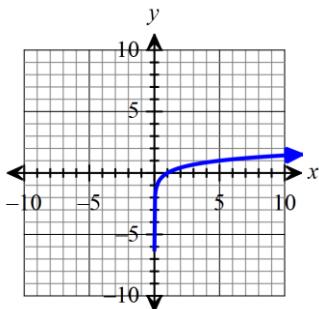
41. $\log_2 x^{5/2}$ or $\log_2(x^2 \sqrt{x})$

43. $\log_7\left(\frac{xz}{y^2}\right)$

45. $\log\left(\frac{x+2}{x+1}\right)$

47. $\log_a\left(\frac{25x^6}{\sqrt{2x+3}}\right)$

49.



51. $y = Cx^2 + Cx$