

College Algebra Answers to Review Test 4

1. D: \mathbb{R} R: $(-3, \infty)$
2. 140
3. D: $(1, \infty)$ R: \mathbb{R}
4. $10^1 = 10$
5. $e^y = x$
6. $\ln x = 2$
7. $\log 100 = 2$
8. -1.7712
9. 3.1699
10. -1
11. 3
12. $\frac{3}{5} + \frac{1}{5} \ln x$
13. $8 \log x + 12 \log y - 4 \log z$
14. $\ln 5 + \ln x - \frac{1}{3} \ln(x^2 + 1)$
15. $\log \frac{(x^2 + 1)^{\frac{2}{3}}}{4(x - 3)^3}$
16. $\ln \frac{x^4 y^8}{z^3}$
17. $\frac{1}{3} \left(\frac{\ln 2}{\ln 5} + 1 \right)$
18. $-\frac{13}{31}$
19. $\frac{7}{3}$
20. $k = \frac{\ln 5 - \ln 2}{2}$
21. $k = .1, 11$ hours
22. False, can't distribute logs!