

NAME _____ DATE _____ PERIOD _____

ALGEBRA 2 Test Review

Solve. Show all work. Round to three decimal places where appropriate—note any extraneous roots.

_____ 1. $\log_3 5 = \log_3 100 - \log_3 x$

_____ 6. $\log_6 x = -1$

_____ 2. $3^{x+1} = 27^{x-2}$

_____ 7. $2\log_2 x + 4 = 12$

_____ 3. $\log_3 (x - 2) = 2$

_____ 8. $\log_a x = 3\log_a 2 + \log_a 3$

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

_____ 9. $2^x - 10 = 6$

_____ 5. $12 \ln x = 48$

_____ 10. $3e^x = 12$