

Math III
Solving Exponential and Logarithmic Equations

Name _____
per. _____

Solve for x

1. $2^x = 10$

2. $10^{2x} + 3 = 8$

3. $-5^{-x} + 9 = 6$

4. $3^{0.1x} - 4 = 5$

5. $\log 5x + \log(x-1) = 2$

6. $4\log_3 x = 28$

7. $\log_5(2x+15) = \log_5 3x$

8. $16^x = 64$

9. $9^x = 27$

10. $5^x = 33$

11. $\log 3x = 1$

12. $\log_2 4x = 5$

13. $\log_2 x + \log_2(x+3) = 2$

14. $7^x = 16$

15. $\log(x-5) = 2$

16. $3\log(x+1) = 12$

17. $10^{x+2} = 347$

18. $5^{x-2} + 1 = 18$

19. $2\log_2(x+1) = 6$

20. $2^{4x-2} = 64$