

Group Members: _____

Per: _____



LOGARITHMIC & EXPONENTIAL EQUATIONS REVIEW

Directions: Work **together** to solve each equation. Do not divide up the work! Each person should be participating. At the end of class, one person's paper will be chosen at random and graded for the group.

LOGARITHMIC EQUATIONS

1. $\log_7(9x - 4) = \log_7(x + 20)$	2. $\log_5(m^2 - 12) = \log_5 m$
3. $\log_3 4 + \log_3(a + 5) = \log_3 56$	4. $\log(2y - 10) = 7 \cdot \log 2 - \log 8$
5. $\log_4(5m + 9) = 3$	6. $\log_{36}(20 - 4p) = \frac{1}{2}$
7. $\log_6(7k - 1) = 3$	8. $\log(n + 8) + \log 4 = 2$

EXPONENTIAL EQUATIONS

9. $25^{v-2} = 625$

10. $\frac{1}{16} = 8^{4x-2}$

11. $8^k = 78$

12. $9^{m-6} = 78$

13. $15^{3a} + 7 = 67$

14. $14^{3-8x} + 9 = 77$

15. $8 \cdot 3^{n-1} - 21 = 51$

16. $2 \cdot 18^{10r-3} - 1 = 73$