

Name _____
Due Date _____
Block _____

Exponents and Logarithms #4

Solve:

1. $10^x = 53$

5. $7^x = 542$

2. $10^x = 453$

6. $-3 \cdot 4^x = -48$

3. $4^x = 16$

7. $12^x = 94$

4. $6^x = 216$

8. $5^x = 321$

Use the laws of exponents to simplify:

9. $\log_4 8 + \log_4 2$

12. $\log_9 3 + \log_9 3$

10. $\log_5 5000 - \log_5 8$

13. $\log_8 4 + \log_8 2^4$

11. $\log_6 36^{12}$

14. $\log_4 16^{84} - \log_4 16^{54}$