

Algebra 2 Honors

Extra Problems 8.4 & 8.5
(DO WORK ON OWN
PAPER)

Evaluate: 1. $\log_8 4$ 2. $\log_7 \sqrt[3]{49}$

Solve for x : 3. $\log_4 x = \frac{-3}{2}$ 4. $\log_x 27 = \frac{3}{4}$

5. $\log_5 (\log_3 x) = 1$ 6. $\log_{16} x = \frac{-3}{4}$

Expand. Express your answer in terms of $\log_2 M$ and $\log_2 N$.

7. $\log_2 \sqrt[3]{M^2 N}$

8. $\log_2 \frac{4}{MN}$

Condense to a single logarithm: 9. $\log_5 x - \log_5 y + 2$

Evaluate: 10. $\log_7 7\sqrt{7}$

11. $\log_2 \sqrt[3]{\frac{1}{4}}$

12. $2\log 5 + \log 4$

13. $\log_4 40 - \log_4 5$

