

Name _____

Due Date _____

Block _____

Exponents and Logarithms#3

Calculate each to the 1000th place using a calculator:

1. $\log 8$
2. $\log 9$
3. $\log 100$
4. $\log 105$

Use the definition of a logarithm to calculate:

5. $\log_3 27$
6. $\log_2 16$
7. $\log_5 625$
8. $\log_2 64$
9. $\log_2 8 + \log_2 16$
10. $\log_5 125 - \log_3 81$

Solve each equation:

11. $10^x = 8$
12. $10^{2x} = 8$
12. $4^x = 12$
13. $2 \cdot 5^{3x} = 144$
14. $3^x - 7 = 10$
15. $5^{5x} = 125$