

Name _____

Date _____

Solve for the Unknown (Using Logarithms) Problems - Matching Worksheet

Write the letter that represents the missing variable for each problem.

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|-------|--------------------------------------------------------|---------------------------|
| _____ | 1. $\log_5 b + \log_2 1024 = 11$ | a. 1.08×10^{-35} |
| _____ | 2. $\log_{11} b + \log_8 \sqrt[2]{8^{60}} = 31$ | b. 5 |
| _____ | 3. $\log_6 36 - \log_6 x = \frac{1}{3} \log_{10} 1000$ | c. 1.93×10^{-31} |
| _____ | 4. $\log_6 x + \log_5 625 = 5$ | d. 2.17×10^{-20} |
| _____ | 5. $\log_2 1024 - \log_3 x = 8$ | e. 11 |
| _____ | 6. $\log_2 b + \log_2 324 = 28$ | f. 258471052994.2 |
| _____ | 7. $\log_2 b + \log_2 1089 = 48$ | g. 6 |
| _____ | 8. $\log_2 2025 - \log_4 x = 62$ | h. 828504.5 |
| _____ | 9. $\log_2 1936 - \log_4 x = 69$ | i. 6 |
| _____ | 10. $\log_2 1296 - \log_4 x = 43$ | j. 9 |

