Name _____   Date _____

Logarithmic Functions- Matching Worksheet

Write the letter of the answer that matches the problem.

_____ **1. The statement $6 = \log_2 64$**

a. All Real Numbers

_____ **2. Exponential form of $5/2 = \log_6 88.2$**

b. 5

_____ **3. Exponential form of $9 = \log_3 19683$**

c. $19683 = 3^9$

_____ **4. Exponential form of $5 = \log_{10} 100000$**

d. $1 = 1^9$

_____ **5. Range of $y = \log_8 x + 4$**

e. $64 = 2^6$

_____ **6. Solution of $\log_4 16^7$**

f. $100000 = 10^5$

_____ **7. The vertical asymptote of the function,**
$f(x) = 2\ln(|x|)$

g. ± 1

_____ **8. The vertical asymptote of the function,**
$f(x) = -3\ln(x - 4)$

h. $88.2 = 6^{2.5}$

_____ **9. Exponential form of $9 = \log_1 1$**

i. 14

_____ **10. Find the range of:**
$y = \log_9 x + 2$

j. All Real Numbers