ALG2CP

Properties of Logarithms Worksheet

1. Complete the following statements.

 a) The logarithm of the product of two numbers equals the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the logarithms of the

 numbers.

 b) The logarithm of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of two numbers equals the difference of the logarithms of the two

 numbers.

Write each expression in terms of and .

 2.  3.  4. 

5.  6.  7. 

Write each expression as a single logarithm.

 8.  9.  10. 

11.  12.  13. 

Write the following as a single logarithm and give its numerical value.

 14.  15.  16. 

Let and . Write each expression in terms of x and y.

 17.  18.  19. 