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. 

Answers

1. a) sum b) quotient

2.  3.  4. 

5.  6.  7. 

8.  9.  10. 

11.  12.  13. 

14. 2 15. 3 16. 

17.  18.  19. 