

You may have correctly used the quotient rule to get

$\log_4\left(\frac{64x}{16y}\right) = \log_4 64x - \log_4 16y$ , and then used the product rule. But you probably forgot to distribute the minus sign when rewriting  $\log_4 16y$  as  $\log_4 16 + \log_4 y$ .