

Math 3

"Solving Logarithms Using Condensing"
Act. #66

* Solve the following. Condense first.

$$\boxed{1} \log_2 3 + \log_2 x = 5$$

$$\boxed{2} \log_4 x - \log_4 6 = 2$$

$$\boxed{3} \log_3 6 + \log_3 (x+5) = 4$$

$$\boxed{4} \log_5 (2x+3) - \log_5 4 = 2$$

$$\boxed{5} \log (x+2) + \log (10) = 2$$

$$\boxed{6} \log_2 (5x) - \log_2 (3) = 4$$

$$\boxed{7} \log_{16} (x^3) + \log_{16} 2 = 1$$

$$\boxed{8} \log_6 (4) + \log_6 (3x-1) = 2$$

$$\boxed{9} 3 = \log (5x-10)$$

$$\boxed{10} \log (6x-4) - \log (2x+5) = 1$$

$$\boxed{11} 2 = \log_5 (5x) + \log_5 (5x^2)$$

$$\boxed{12} \log_4 8 + \log_4 2 + \log_4 (x-10) = 3$$