Name _____ Date _____

$\log_3 x + 2\log_3 y - 4\log_3 z$

$\frac{1}{2}\log_{10} x + 3\log_{10}(x+1)$

$\ln 2 + \frac{1}{2}\ln a - 4\ln b - 3\ln c$

$2\log(x+2) - \log x$

$2\log_4 x + \frac{1}{3}\log_4 (x+2)$

7. $\log_8 3 + \frac{1}{2}\log_8 x - 2\log_8 3$

$4\ln d - \ln a - 2\ln k - 3\ln m$

$2\log x + \frac{1}{3}\log(x-1) - 2\log 3 - 3\log x$