Logarithmic Equations

Solve each logarithmic equation.

$\log_5 8x - \log_5 2 = \log_5 16$

$x =$ _____

$\log_3(3x - 2) - \log_3 x = \log_3 2$

$x =$ _____

$\log_{10}(7x - 6) - \log_{10} 2 = \log_{10} 2x$

$x =$ _____

$\log_2(x + 1) - \log_2(x - 1) = \log_2 5$

$x =$ _____