EQ-2 Exponential and Logarithmic Equations

(Complete both parts for M, complete 1 with progress on the other for P) Solve the following equations. Leave answers as integers, simplified fractions, or in terms of natural logarithms.

a)
$$4^{1-x} = 3^{2x+5}$$

b)
$$\log_8(x+5) - \log_8(x-2) = 1$$