

Act. #95  
"Solving Logarithms"

Solve the following:

1)  $\log_2 x + \log_2 (x-3) = 2$

2)  $\log (5x-1) - \log (x-2) = 2$

3)  $\log_2 (x^2 - 6x) - \log_2 (1-x) = 3$

4)  $\log_4 (2x+1) = \log_4 (x+2) - \log_4 3$

5)  $2e^{3x-5} = 7$

6)  $\frac{1}{2} \ln 9 - 2 \ln x = \ln 5 - \ln 15$

7)  $2 \log (x-2) = \log 36$

8)  $3 \ln x - 2 \ln x = \ln (2x+3)$

9)  $\log_2 (4x+3) - \log_2 (x-1) = \log_2 \left( \frac{x+1}{2} \right)$

10)  $13 + 5e^{x-2} = 15$