1. (3 points) Write the expression $\frac{1}{5}(\ln z - 2\ln y)$ in condensed form (i.e. as a single logarithm).

2. (4 points) Solve the equation $5^{2x+1} = 1$.

3. (5 points) Solve the equation $\log_3(2x+3) - \log_3(x-5) = 1$.

- 4. (3 points) Calculate the values of the following three logarithms; write your final answer as a number without logarithms:
 - $\log_{16} 2$.
 - $\log_3 \frac{1}{27}$.
 - log₇ 49.