Mastery Check

1) Rewrite the logarithm as a ratio of common logarithms and natural logarithms.

$$\log_4 5$$

2) Simplify.

$$\log \frac{9}{300}$$

3) Expand.

$$\ln\left(\frac{x^2-1}{x^3}\right)$$

4) Condense.

$$3\log_3 x + 4\log_3 y - 4\log_3 z$$