

1. Simplify the following expressions:

a) $\ln x + \ln y$

b) $\ln a - \ln b$

c) $2 \ln f + 3 \ln f$

d) $e^m e^k$

e) $\frac{e^c}{e^d}$

2. Expand the following expressions:

a) $e^{(3h-j)}$

b) $e^{2(c+w)}$

c) $\ln h/g$

d) $\ln(kT)$

e) $\ln \sqrt{\frac{q}{r}}$