Homework 2

FYS 129: Mathematics and Finances

No calculators allowed unless mentioned otherwise.

- 1) Compute:
 - (a) $\log_3(27)$
 - (b) $\log_2(1/8)$
 - (c) $\log_4(32)$
 - (d) $\log_2(1)$
- 2) If $2^x = 3$, use your calculator [it is OK in this problem] to find an approximation of x.
- **3)** If $\log_{27}(a) = 2$, then what is $\log_3(a)$?
- 4) If $\log_a(x) = 2$ and $\log_a(y) = 3$, then compute:
 - (a) $\log_a(x \cdot y)$
 - (b) $\log_a(\sqrt{x})$
 - (c) $\log_a(1/y)$