

CMSC 441

Homework 2

Reading Assignment:

- Listen to Peer Gynt's "In the Hall of the Mountain King"
- Read Chapter 4 of the text

Homework:

- Simplify $\prod_{j=0}^{n-1} (2 \cdot 4^j)$ as much as possible
- Change the variable of summation in $\sum_{k=0}^6 \frac{1}{k+1}$ from k to $j = k + 1$
- Use the definition of $\log_b a$, i.e., $a = b^{\log_b a}$, to prove that
$$a^{\log_b c} = c^{\log_b a}$$
- Compute $\lg^*(5)$
- Exercise 4.2-1, page 82