

CSCI 301 — Math Exercises # 6

YOUR NAME HERE

Due date: Midnight, Friday, November 30

Prove that each of the following languages is context-free by finding a context-free grammar for it.

1. $\{a^i b^j \mid i \geq j \geq 0\}$
2. $\{a^{4n+5} b^{3n+2} : n \geq 0\}$
3. $\{a^i b^j c^k \mid i = j \text{ or } j = k\}$