

# CSCI 301 — Math Exercises # 5

YOUR NAME HERE

Due date: Midnight, Monday, November 26

Use the pumping lemma to prove that each of the following languages is not regular.

1.  $\{a^i b^j \mid i \geq j \geq 0\}$
2.  $\{a^i b^j c^k \mid i = j \text{ or } j = k\}$