ENGG 2470A   **Assignment 8**   **Spring 21**

Textbook Problems 9.4.6, 9.5.1, 9.5.3, 10.4.1.

Notes

1. For Problem 9.4.6, use Theorems 9.10 and 9.11 in the textbook.

2. For Problem 9.5.3(b), the number of minutes charged has a truncated geometric distribution. See Theorem 4.9 in the textbook.

Supplementary Problems

1. Prove Corollary 6.9 in the lecture notes.

2. Consider tossing a biased coin 5 times, where $P\{\text{Head}\} = 0.3$. Use Chebyshev's inequality to give a lower bound on the probability that the relative frequency of getting a Head is between 0.29 and 0.31.