**Name:**

BINF 730 – Biological Sequence Analysis

Take-Home Mid-Term Exam

October 16, 2023

Due October 23, 2023 by midnight

1. What are the similarities and differences between the following three pairwise sequence analysis algorithms: Needleman-Wunch, Waterman-Smith-Beyer, and Smith-Waterman?
2. How would you compare a list of 10 sequences from a gene from 10 different species to see how the species might be related? Please give details about the steps involved and the algorithms that you would use.