

STA457H1: Time Series Analysis
Assignment 3 - Question 4 **Due date December 2, 2022**

Student Name.....ID number.....

Instructions: *Show your answers in details.*

Q4 (2 points): Identify the following as certain multiplicative seasonal ARIMA models:

1. $x_t = .5x_{t-1} + x_{t-4} - .5x_{t-5} + w_t - .3w_{t-1}$.
2. $x_t = x_{t-1} + x_{t-12} - x_{t-13} + w_t - .5w_{t-1} + -.5w_{t-12} + .25w_{t-13}$.