STA457H1: Time Series Analysis

Assignment 3 - Question 2 **Due data December 2, 2022**

Student Name..ID number..

Instructions: *Show your answers in details.*

Q2 (2 points): Consider the model

$$(1 - 1.1B + 0.8B^2)x_t = (1 - 1.7B + 0.72B^2)w_t$$

1. Verify whether it is stationary, or invertible, or both. **Hint**: $|a + bi| = \sqrt{a^2 + b^2}$.
2. Express the model in an MA representation if it exists.