1. For the game tree in Watson, Chapter 15, Exercise 1c, find the SPNE.
2. Watson, Chapter 15, Exercise 9. [Note: This is a tough one!]
3. Consider the following Stackelberg game. The inverse demand function in the market is given by

\[ p = 1000 - 2q_1 - 2q_2. \]

Each firm incurs a cost of 200 for each unit output it produces.

(a) Find the subgame perfect Nash equilibrium of this game.
(b) In the SPNE, what will be the market price and what will be the profit for each firm?
(c) Find a NE to this game that is not subgame perfect.