Quiz 4

Question 1

Jacques (pronounced YOK) and Amanda are realtors in the fictitious St. Bernard Parish. Jacques exclusively sells haunted houses which often fetch a premium price. Amanda exclusively sells homes akin to the sheds you might see marketed in front of a Home Depot. The demand for haunted houses is $Q_J = 120 - \frac{1}{5}P_J$ while the demand for shed–style homes is $Q_A = 24 - P_A + \frac{1}{5}P_J$. Jacques has a competent team and has no trouble selling haunted houses in Louisiana, so his cost per home is $1 per home. Amanda, on the other hand has an incompetent and inefficient team so her costs are $4 per home.

    a. From the demand equations alone how is the demand for haunted houses related to the demand for shed–style homes and vice–versa?

    b. Write the profit function for each realtor in terms of P_J and P_A

c. Find the Nash equilibrium price,
   quantity, and profit for each
   realtor.

Question 2

The Copeland Index is a **plurative**
method of ranking votes. *T/F*

Question 3

The Intensity ranking method overcomes
the Borda count's violation of the
independence of irrelevant alternatives
assumption. *T/F*