PROBLEM SET 2. BARGAINING.

A three person committee \( N = \{1, 2, 3\} \) has to distribute a dollar. For all \( i \in N \), \( u_i(x_i) = x_i \), and \( \delta_i = \delta = 2/3 \). The status quo is \( x^0 = (0, 0, 0) \), and voting is under simple majority rule.

1. Suppose that recognition probabilities are \( p_1 = 1/3 + 2\varepsilon \), \( p_2 = p_3 = 1/3 - \varepsilon \), for \( \varepsilon > 0 \) but small as you want.
   (a) Suppose that \( t = \{1, 2, 3\} \). Solve for the SPNE outcome.
   (b) Now assume that there are an infinite number of periods. Solve for a stationary SPNE outcome.

2. Suppose that recognition probabilities are \( p_1 = 1 - \varepsilon \), \( p_2 = p_3 = \varepsilon/2 \), for \( \varepsilon > 0 \) but small as you want.
   (a) Suppose that \( t = \{1, 2, 3\} \). Solve for the SPNE outcome.
   (b) Now assume that there are an infinite number of periods. Solve for a stationary SPNE outcome.