Quiz 4

Question 1

Consider an economy described by the following equations:

$$
\begin{aligned}
Y &= C + I + G + NX \\
Y &= 10,000 \\
G &= 3,000 \\
T &= 3,000 \\
C &= 500 + 5/7(Y - T) \\
I &= 900 - 50r \\
NX &= 1,500 - 250\epsilon \\
r &= r^* = 8
\end{aligned}
$$

a. In this economy, solve for private saving, public saving, national saving, investment, the trade balance, and the equilibrium exhchange rate.

b. Suppose now that G is increased to 3,500. Solve for private saving, public saving, national saving, the trade balance, and the equilibrium exchange rate. What happens to the equilibrium exchange rate.

Question 2

a. The formula for the nominal exchange rate is $e = \epsilon \times \frac{P^*}{P}$. Express the formula for the nominal exchange rate in terms of percentage changes.

b. Suppose the nominal exchange rate is in terms of Canadian dollars per U.S. dollar (CAD / USD). What happens to the nominal exchange rate if inflation in Canada increases and there is no change in the United States. Additionally, assume no change in the real exchange rate?

Question 3

a. State the differences between structural unemployment and frictional unemployment.

b. What is the natural rate of unemployment if the rate of job finding, f, is 10 percent per month and the rate of job separation, s, is 0.5 percent per month?

c. If the rate of job is finding 10 percent per month, what is the average spell of unemployment?