Question #1
The economy of Blahnik is defined by the following equations in the Keynesian model.

\[ C = \text{consumption} = 500 + 0.8(Y - T) \]
\[ I = \text{autonomous investment} = 600 \]
\[ G = \text{government spending} = 700 + 0.6T \]
\[ X = \text{autonomous exports} = 400 \]
\[ M = \text{imports} = 200 + 0.2(Y - T) \]
\[ T = \text{net taxes} = 0.1Y \]

(Note that the coefficient 0.2 in our import function is known as the **marginal propensity to import**, an important idea in Keynesian models which is very similar to the marginal propensity to consume.)

a) Write out the savings function in terms of aggregate income, and find the MPC and MPS.

b) Find equilibrium GDP \((Y^*)\) in Blahnik.

c) Find equilibrium consumption, government savings, and capital inflows.

d) Find private savings, using the fact that leakages must equal injections in equilibrium. Does this equal the value that we would get if we plugged \(Y^*\) directly into our savings function from part a?

e) How much does \(Y^*\) increase if President Manolo decides to increase autonomous government spending by $100$? (warning: this problem is very challenging)