Consider a closed economy with fixed prices \((P=P_0=1)\) for convenience, a given stock of capital \((K)\) and wealth effects in the demand for money and consumption function:

\[
Y = C + I + G \\
C = C(Y + B - T, A), \quad 0 < C_{Y+B-T} < 1, \ C_A > 0 \\
I = I(R), \quad I_r < 0 \\
T = T_0 + t(Y + B), \quad 0 < t < 1 \\
M = M(Y, R, A), \quad l_r > 0, \ l_R < 0, \ 0 < I_A < 1 \\
A = \bar{K} + M + B / R \\
G + B = T + \dot{M} + (1/R) \dot{B}
\]

a. Interpret the equations of the model.

b. Let \(Y = AD(B, M, G)\) and \(R = H(B, M, G)\)

Derive mathematically \(AD_B, AD_M, AD_G, H_B, H_M\) and \(H_G\). Draw IS-LM style diagrams to motivate their signs and explain the intuition behind your results.