Homework 8

1. Suppose that the IS and LM equations are as follows,

$$\textbf{IS}: \quad Y = C(Y - T, r) + I(r) + G,$$
$$C(Y - T, r) = a + b \cdot (Y - T) - c \cdot r,$$
$$I(r) = d - e \cdot r,$$
$$\textbf{LM}: \quad \frac{h \cdot M}{P} = L(r, Y) = M_0 + f \cdot Y - g \cdot r,$$

where a, b, c, d, e, f, g, h, and M_0 are all positive constants and $b < 1$.

a) Given an increase in G, say ΔG, calculate the government multiplier effect. Compare your result with (i) the Keynesian Cross case, $c = e = 0$; (ii) the case where $c = 0$.

b) If $f = h = 0$, does a monetary stimulus raise output? Does a fiscal stimulus work?

c) If $g = 0$, does a monetary stimulus raise output? What about a fiscal stimulus?