Answers to Assignment #4.

10.3 (a) $C = C(Y-T) = C((1-t)Y - \bar{T})$

MPC out of income declines from C_0 to $(1-t)C_0$.

(b) The G-multiplier will decrease.

(c) The IS curve will become steeper as a given fall in r will have a smaller increase in Y.

10.4 (a) $\bar{C} \downarrow \Rightarrow$ IS shifts to the left $\Rightarrow$ $Y \downarrow$ and $r \downarrow$.

(b) S (saving) $= Y - T - C$

$= Y - T - \bar{C} - c(Y-T)$

$= (1-c)(Y-T) - \bar{C}$.

$\Delta S = (1-c)\Delta Y - \Delta \bar{C}$

In the Keynesian Cross model, $\Delta Y = \frac{1}{1-c}\Delta \bar{C}$.

In this case, $\Delta S = (1-c)\cdot\frac{1}{1-c}\Delta\bar{C} - \Delta\bar{C}$

$= \Delta\bar{C} - \Delta\bar{C}$.

$= 0$.

No change.

(c) The increase in thriftiness ends up lowering Y without any change in S.

(d) In Ch 3, Y is held at $\bar{Y}$, no change.

A decrease in $\bar{C}$ is reflected in an increase in $\bar{S}$ dollar for dollar.

11.2 (a) In this case, investment demand increases.
⇒ IS shifts to right ⇒ Y ↑ and r ↑.
⇒ C ↑ and I ↑.
(Note: In this case, changes in I reflect two factors: (A) the initial increase in investment demand and (B) the resulting increase in Y. (A) raises I and (B) lowers it. On balance, I must rise.)
(To figure this out, examine Y = C + I + G. Here G does not change. ΔC is smaller than ΔY, ⇒ ΔI must be positive, or I has to increase.)

(b) In this case, money demand rises and the LM shifts to the left ⇒ Y ↓ and r ↑
⇒ C ↓ and I ↓ (as discussed in class)

(c) Similar to Problem 10.4
an autonomous reduction in C ⇒ IS shifts to the left
⇒ Y ↓ and r ↓
⇒ C ↓ and I ↑.

11-4 (a) MP has no effect. FP has maximal effect.
(b) MP " maximal " FP " no "
(c) MP " maximal FP " maximal "
(d) MP " no " FP " maximal "