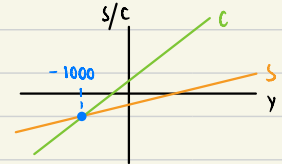
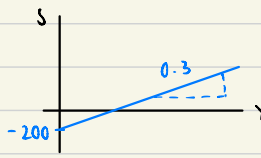
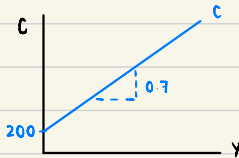


Exercise 3 -

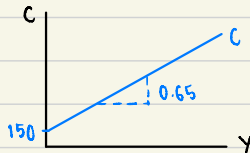
1. MPC = marginal propensity to consume, $\Delta C / \Delta Y$: a fraction of ΔY that is consumed
The change in consumption will always occur as a result of the change in income, but will be less than ΔY .

2. $C = 200 + 0.7Y$

$S = -200 + 0.3Y$



3. $C = 150 + 0.65Y$



4. 1) planned investment decreases, AE graph shifts down, lower Y^*
2) government spending increases, AE shifts up, higher Y^*
3) autonomous saving increases so consumption decreases, AE shifts down, lower Y^* -
paradox of thrift
4) MPS increases so MPC decreases, AE gets less steep, lower Y^*
5) tax increases so consumption decreases, AE shifts down, lower Y^*

5. $Y > AE$ an increase in inventories will force firms to cut back their production to reach equilibrium output, $Y^* = AE$

6. $S = I : S = -60 + 0.4Y = 20$

$$Y = 80 / 0.4 \Rightarrow Y^* = 200$$

7. $Y = C + I : Y = 60 + 0.6Y + 40$

$$0.4Y = 100 \Rightarrow Y^* = 250$$

$$\text{investment multiplier} = \Delta Y^* / \Delta I = 50 / 20 = 2.5$$

8. Based on the idea that "one man's spending is another man's income" in a circular flow,

an injection (eg. ΔI) will lead to a chain of consumption and income, making the corresponding change in output much greater due to an increase in demand.

- Higher MPC means that greater fraction of ΔY (initially gained from an investment) will be used in consumption and remain in the circular flow ^{for further investment}, instead of being leakage eg. saving and spent on imports. \Rightarrow high MPC = large investment multiplier
- Paradox of thrift: when people attempt to save more, consumption decreases so lower output and income, leading to no overall ΔS

