

Exercise: Unit I

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Name \_\_\_\_\_  
 Lab Day/Time 10:00-12:50 Thurs.  
 Lab Instructor Carlstrom

1. Suppose the bookstore increases the price of pencils by 100%. Will this price increase raise or lower the bookstore's total revenues? Why or why not?

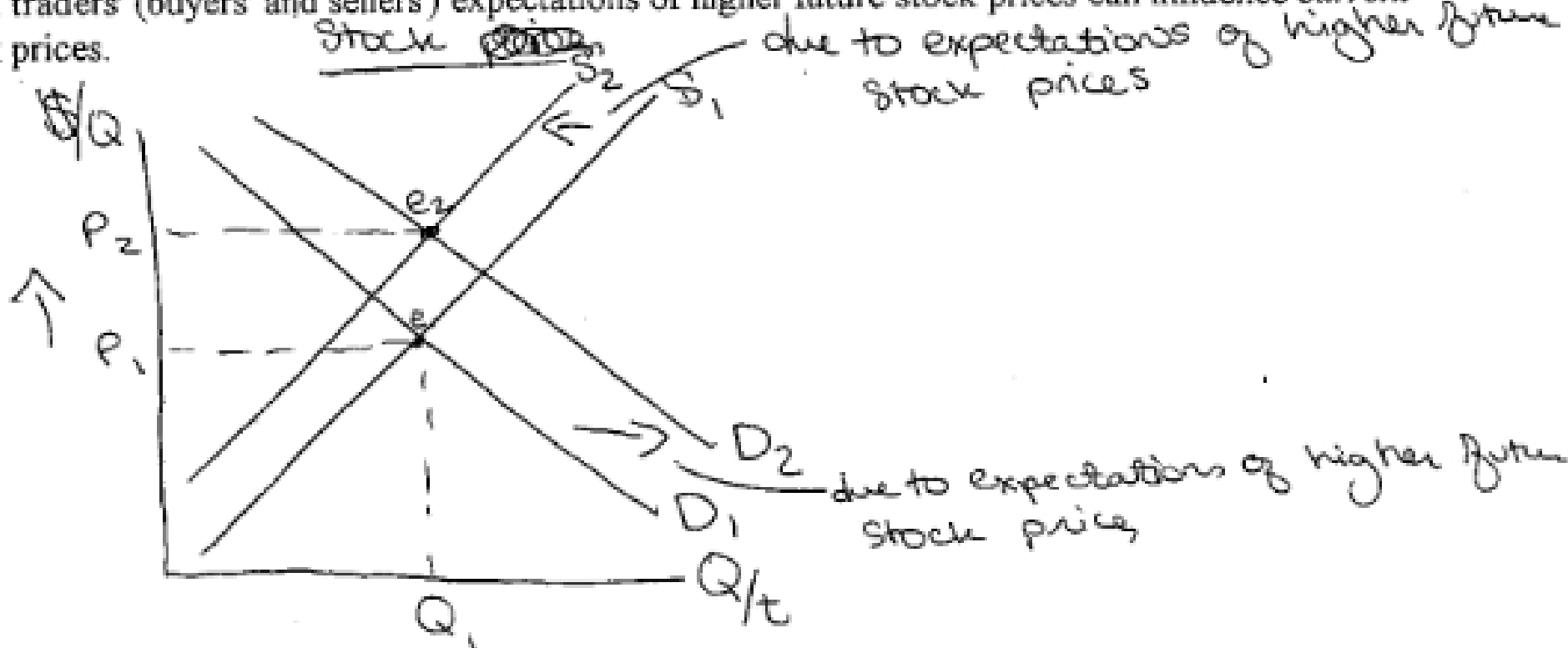
$$E_d = \left| \frac{\% \Delta Q_D}{\% \Delta P} \right| \Rightarrow E_d < 1, \text{ inelastic, } P \uparrow, TR \uparrow$$

$$\Rightarrow E_d > 1, \text{ elastic, } P \uparrow, TR \downarrow$$

Because the  $\% \Delta Q_D$  is unknown, the  $E_d$  can either be greater than one which means an increase in price and increase in total revenue thereby making it inelastic or  $E_d > 1$  which means the price increases ~~but~~ total revenue decreases thereby making it elastic.

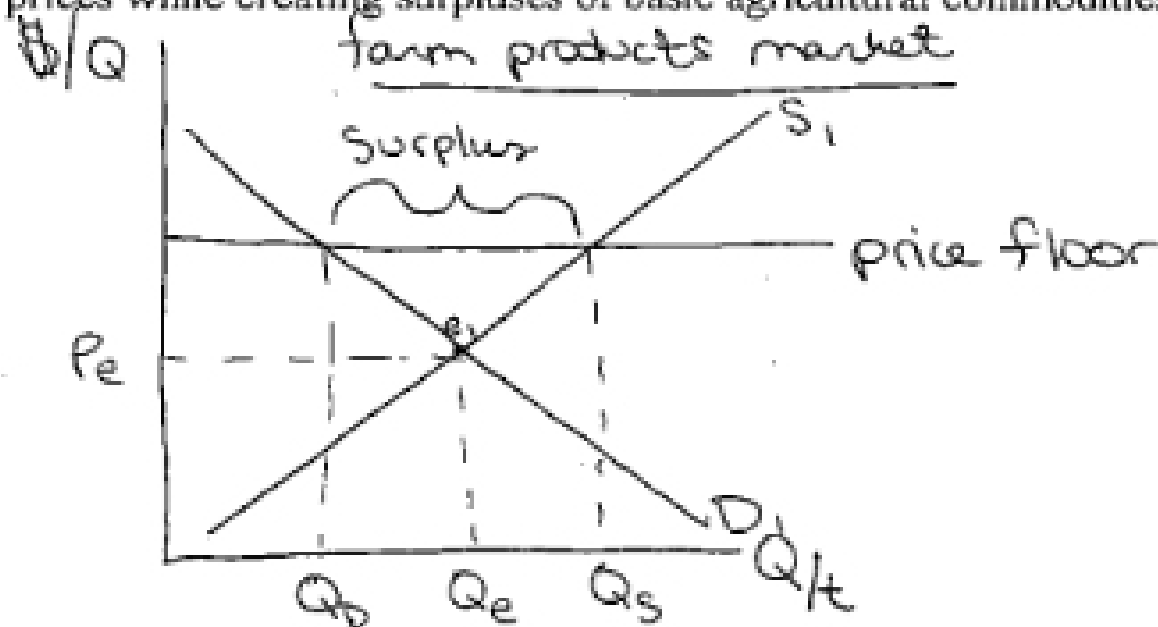
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2. Use a competitive market supply/demand diagram and brief verbal descriptions to explain how stock traders' (buyers' and sellers') expectations of higher future stock prices can influence *current* stock prices.



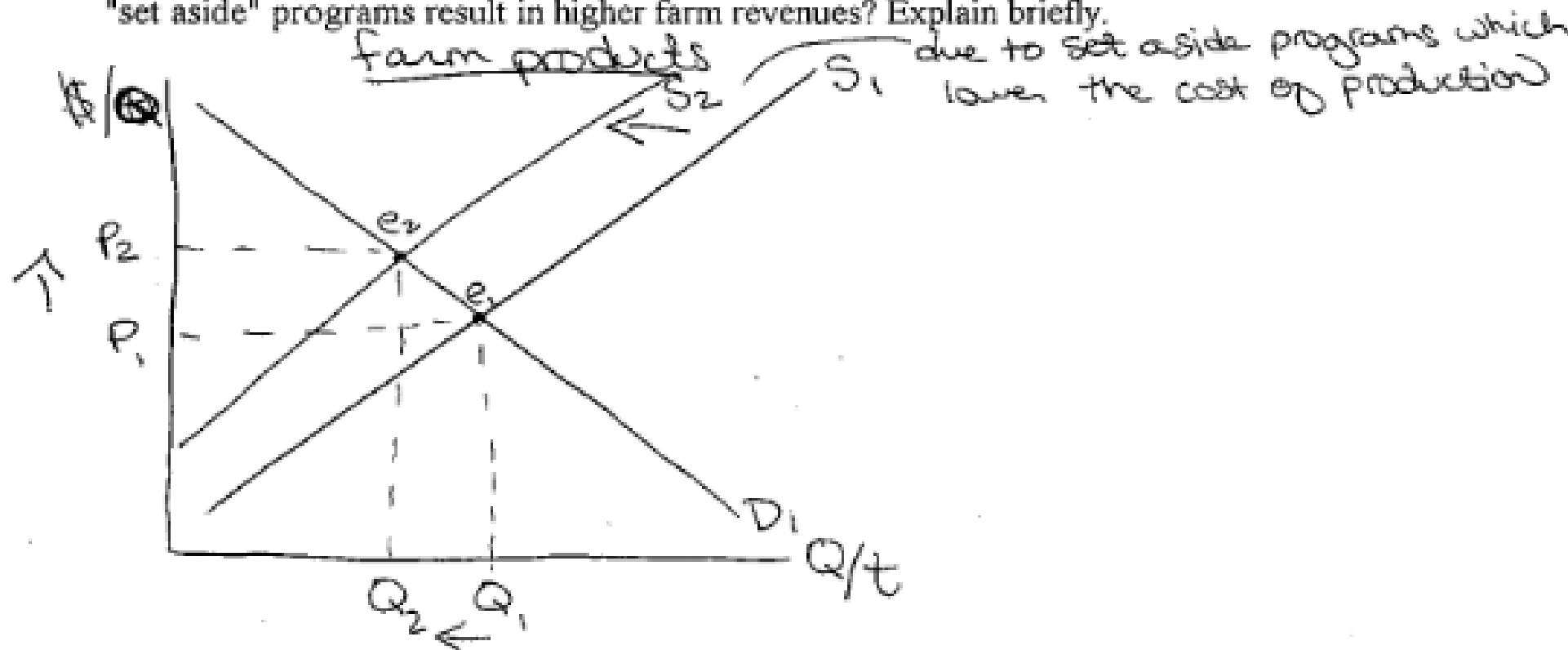
With the expectations of higher future stock price, demand increases and supply decreases. This causes the price to increase + the Quantity is ambiguous

3. Use a competitive supply/demand diagram of the farm products market and brief verbal descriptions to explain the following: "Agricultural price supports (legal price floors) raise food prices while creating surpluses of basic agricultural commodities."



when the price floor is enacted the price is raised above equilibrium. ~~for~~ This ~~state~~ means that the Quantity supplied is greater than the Quantity demanded and this creates a surplus of basic agricultural commodities.

4. Acreage "set aside" programs are designed to reduce the supply of farm products and increase the total revenues of farmers. (1) Use a competitive supply/demand diagram to illustrate a decrease in the supply of farm products. (2) Under what conditions of demand elasticity will the "set aside" programs result in higher farm revenues? Explain briefly.



$\left| \frac{\% \Delta Q_d}{\% \Delta P} \right| = E_d < 1$ , this diagram shows that the market is relatively inelastic. The increase in Price, decrease in Quantity from the reduction of supply results in higher total revenues. The  $\% \Delta Q_d$  was less than  $\% \Delta P$  change in price showing that it is more inelastic.

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1. Define average propensity to consume (APC) and marginal propensity to consume (MPC). Briefly discuss Keynes' views concerning the APC and MPC.

APC = the fraction of disposable (or after tax) income devoted to consumer spending

MPC = the change in consumer spending due to an increase in disposable (or after tax) income

Keynes = MPC is always between 0 and one  
 • APC declines when disposable income increases

At some level of  $Y_d$ , consumer spending =  $Y_d$

2. Consider the following consumption function:  $C = 5000 + .75 Y_d$

- a. How much would consumer spending amount to for a family with after-tax income of \$20,000? (Show your calculations). Is this family "breaking even"? Why or why not?

$$C = 5000 + .75(20,000)$$

$$C = 5000 + 15,000$$

$$C = 20,000$$

The family is breaking even b/c the amount of consumption is the same as the amount of disposable income, zero savings

$$\text{savings} = Y_d - C$$

$$= 20,000 - 20,000 = 0 = \text{savings} = \text{break even}$$

- b. What is the APC and level of savings (S) of a family with disposable income of \$100,000? (Show your calculations).

$$C = 5000 + .75(100,000)$$

$$C = 5000 + 75,000$$

$$C = 80,000$$

$$APC = \frac{80,000}{100,000} = \frac{C}{Y_d} = \boxed{.8}$$

$$\text{savings} = Y_d - C$$

$$= 100,000 - 80,000 = \boxed{20,000} = \text{savings (S)}$$