CH. 3 EQUILIBRIUM

- 9) explain the role of price in a market economy;
- 10) define and illustrate equilibrium;
- 11) define and illustrate surpluses and shortages;
- 12) define effects of surpluses and shortages on prices and quantities;
- 13) predict the changes in price and quantities given changes in demand and/or supply;
- 14) interpret and/or compute equilibrium price and quantities from graphs, mathematics equations, and/or data; and interpret market conditions given novel data.

SUPPLY, DEMAND AND EQUILIBRIUM

- **Equilibrium** in a competitive market: when the quantity demanded of a good equals the quantity supplied of that good.

QS= QD

- The price at which this takes place is the **equilibrium price** (a.k.a. *market-clearing price*):
  - Every buyer finds a seller and vice versa.
  - The quantity of the good bought and sold at that price is the **equilibrium quantity.**

SG Pg 71-74 #7-8

MC Page 85-87 #26-29, 32 & 33

SUPPLY AND DEMAND TOGETHER

Demand Schedule

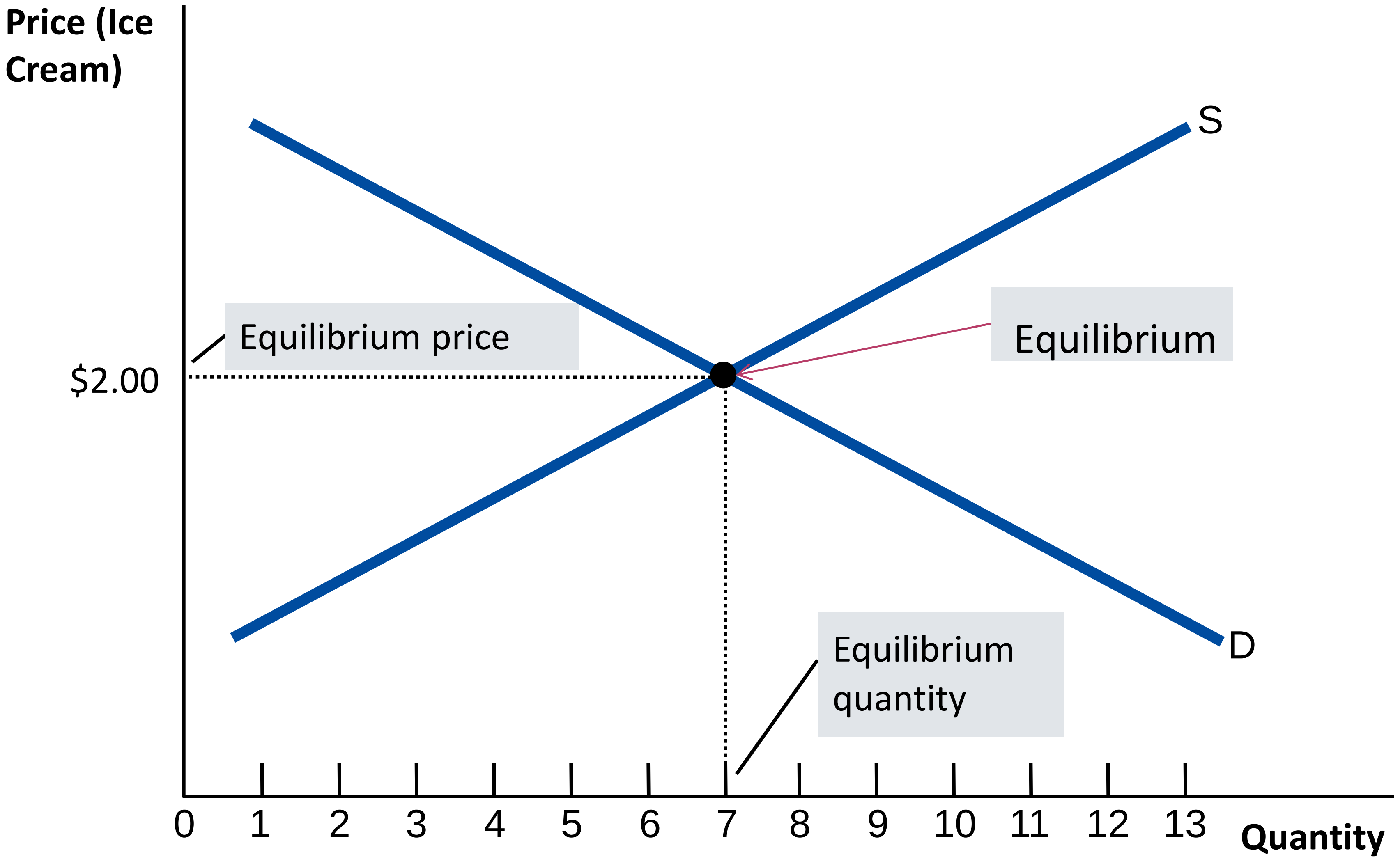
Price of Ice-Cream Cone	Market
$0.00	19
0.50	16
1.00	13
1.50	10
2.00	7
2.50	4
3.00	1

Supply Schedule

Price of Ice-Cream Cone	Market
$0.00	0
0.50	0
1.00	1
1.50	4
2.00	7
2.50	10
3.00	13

At $2.00, the quantity demanded is equal to the quantity supplied!

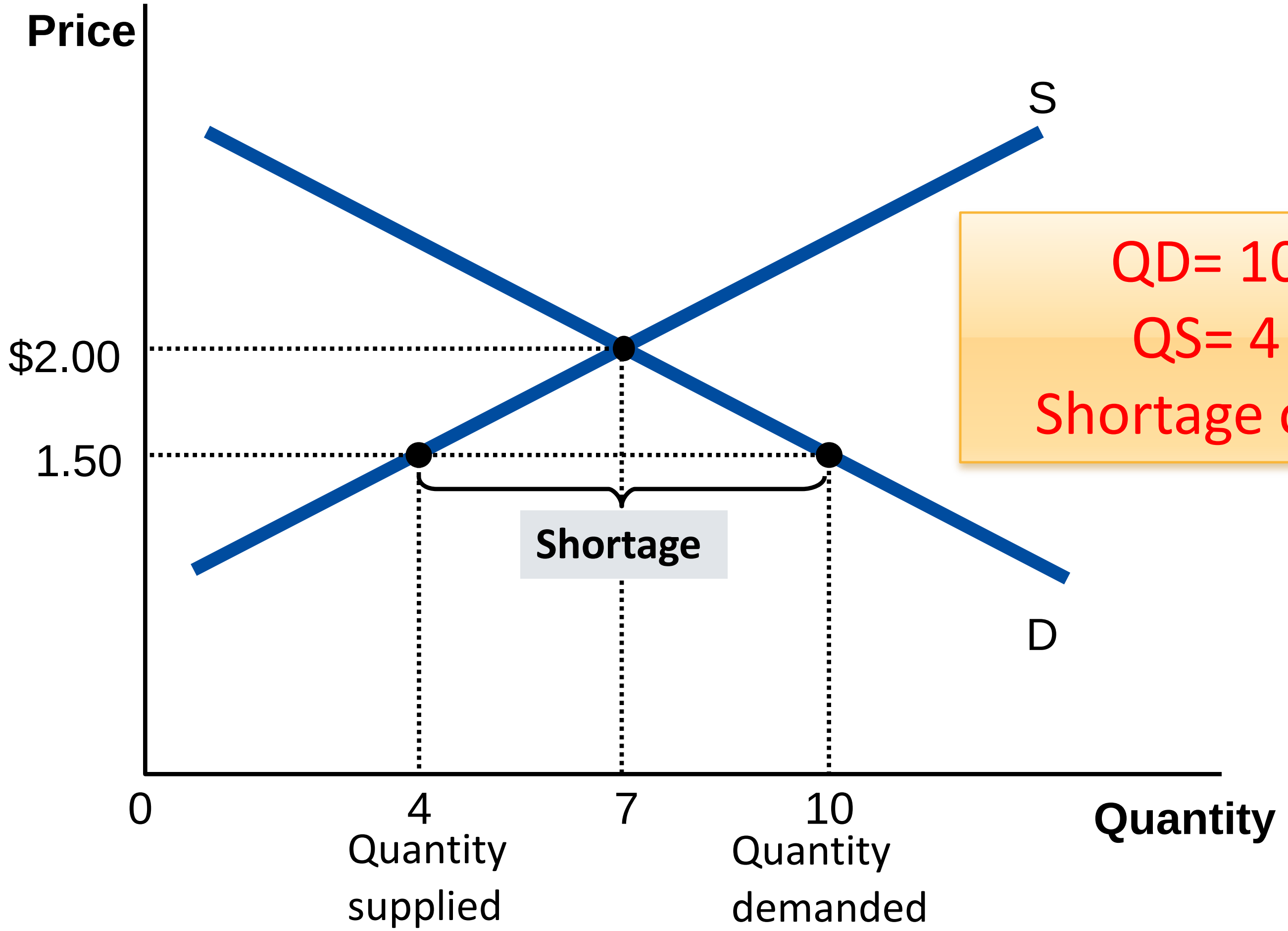
EQUILIBRIUM



WHEN MARKETS ARE NOT IN EQUILIBRIUM

- **Shortage**
  - QD > QS
  - There is excess demand (shortage)
  - Suppliers will raise the price due to too many buyers chasing too few goods, moving toward equilibrium.
- **Surplus**
  - QS > QD
  - There is excess supply (surplus)
  - Suppliers will lower the price to increase sales, moving toward equilibrium.

DISEQUILIBRIUM

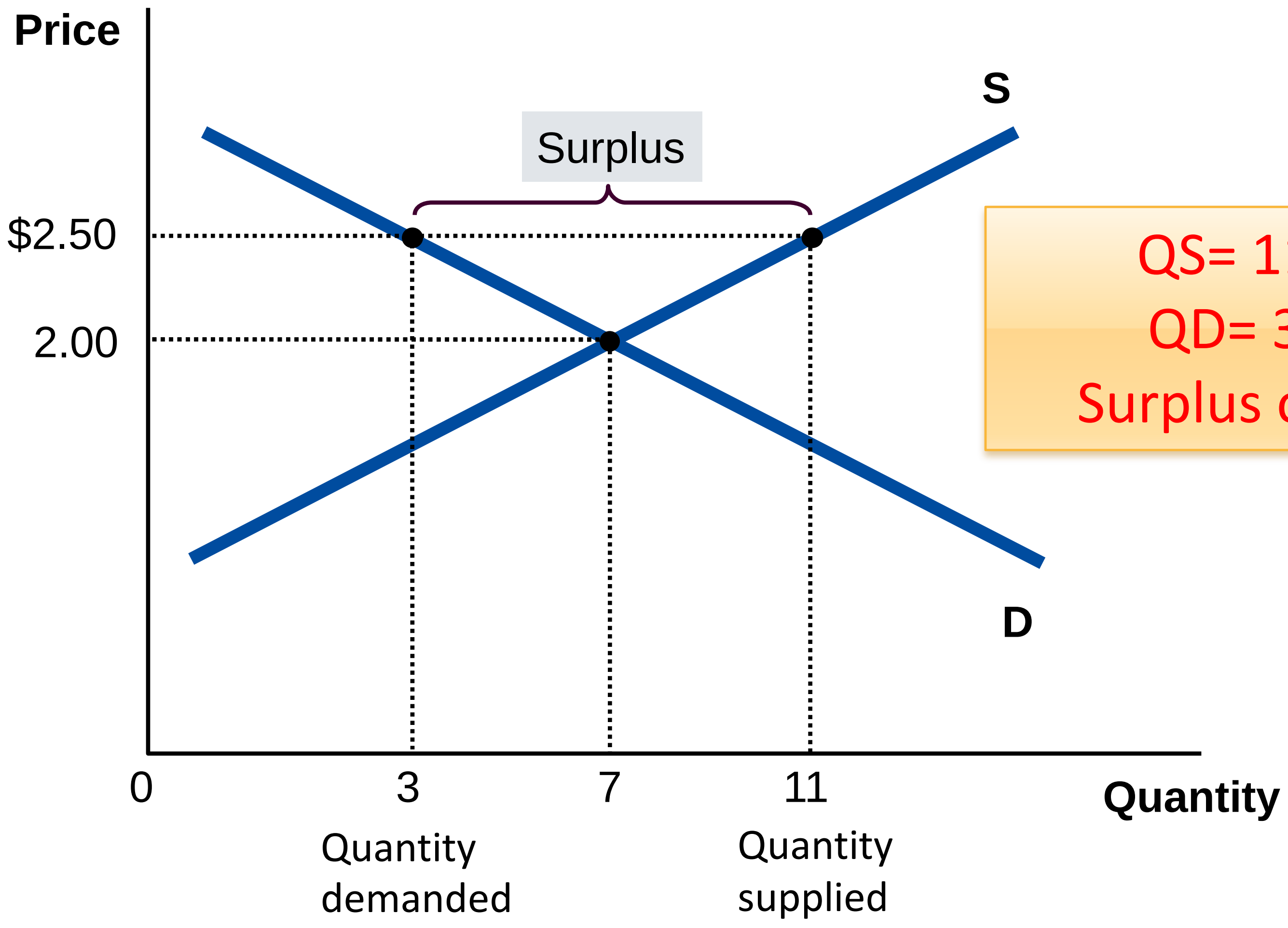


QD= 10

QS= 4

Shortage of 6

DISEQUILIBRIUM



QS= 11
QD= 3
Surplus of 8

CH. 3 EQUILIBRIUM

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Changes in Equilibrium

- **Law of supply and demand**
  - The price of any good adjusts to bring QS and QD into balance.
  - When a curve shifts, find new equilibrium

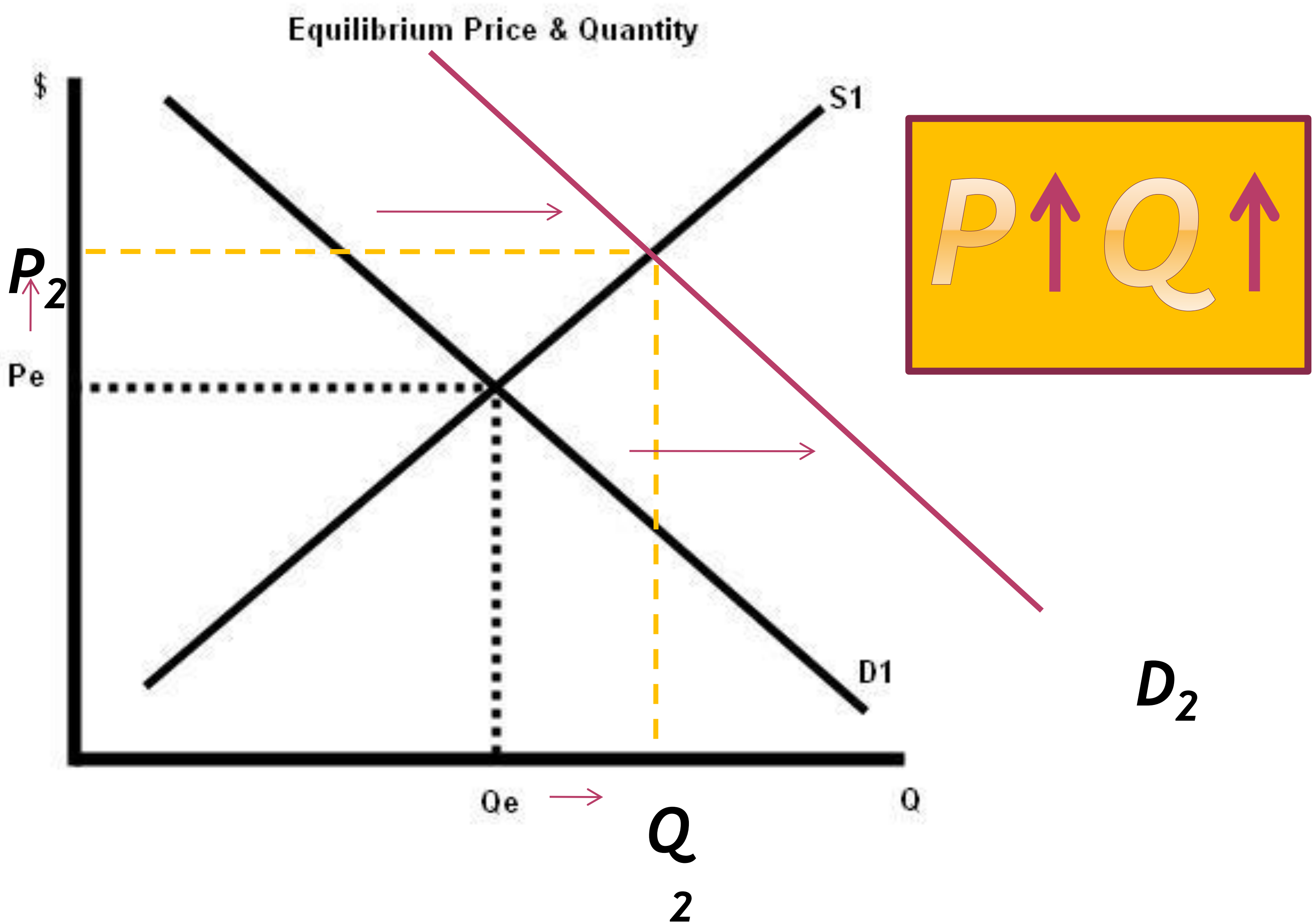
MC Page 88 #34-38

SG Pg 75-79 #10 & 12

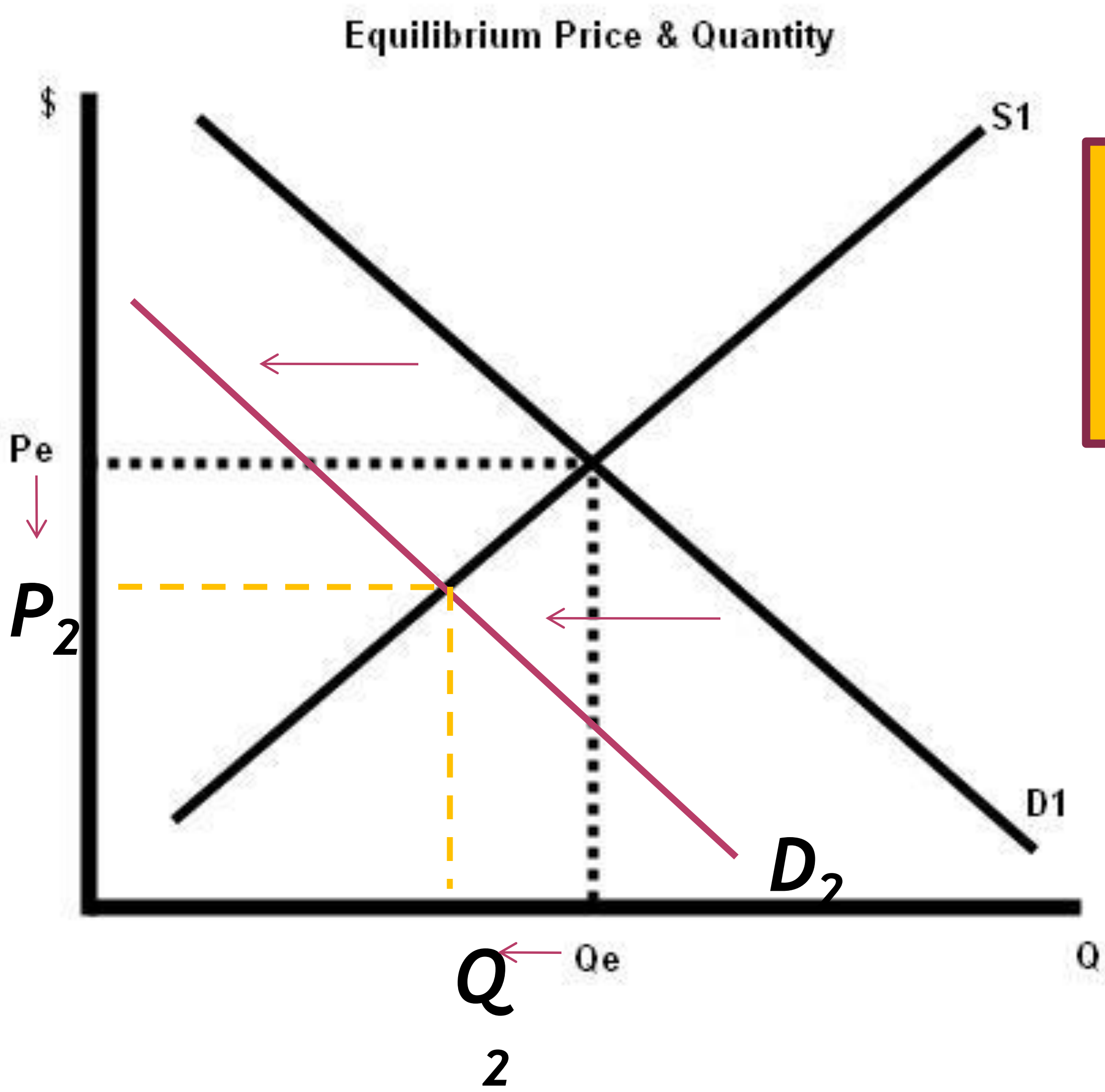
Four Steps to Analyzing Changes in Equilibrium

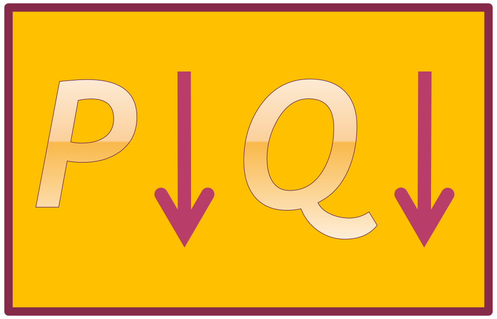
- Does the event shift the supply or demand curve?
- Will the curve shift right (⬆) or left (⬇)?
- Draw & label the new curve on your graph
- Locate the new equilibrium (price and qty)

IF DEMAND INCREASES…

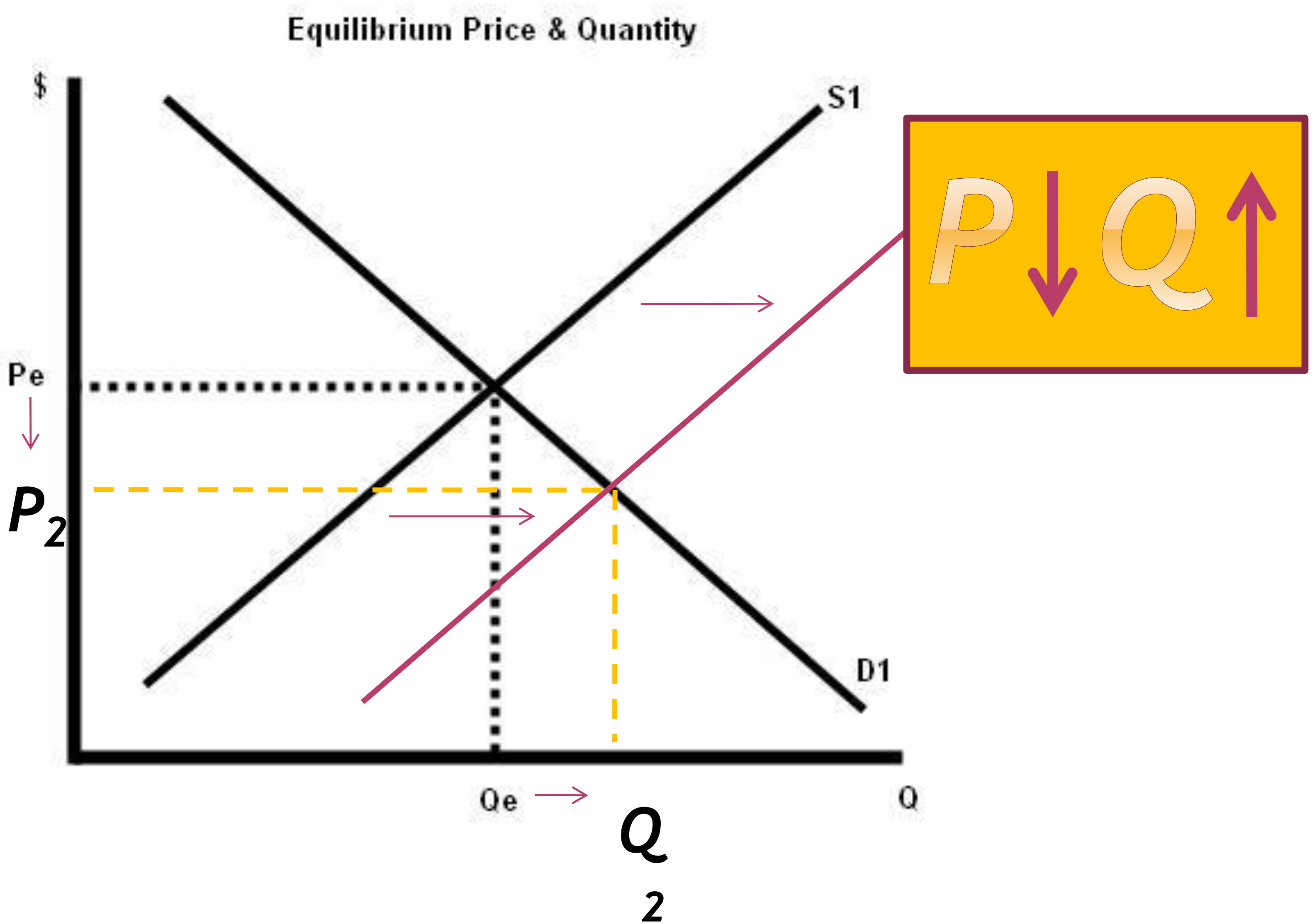


IF DEMAND DECREASES…

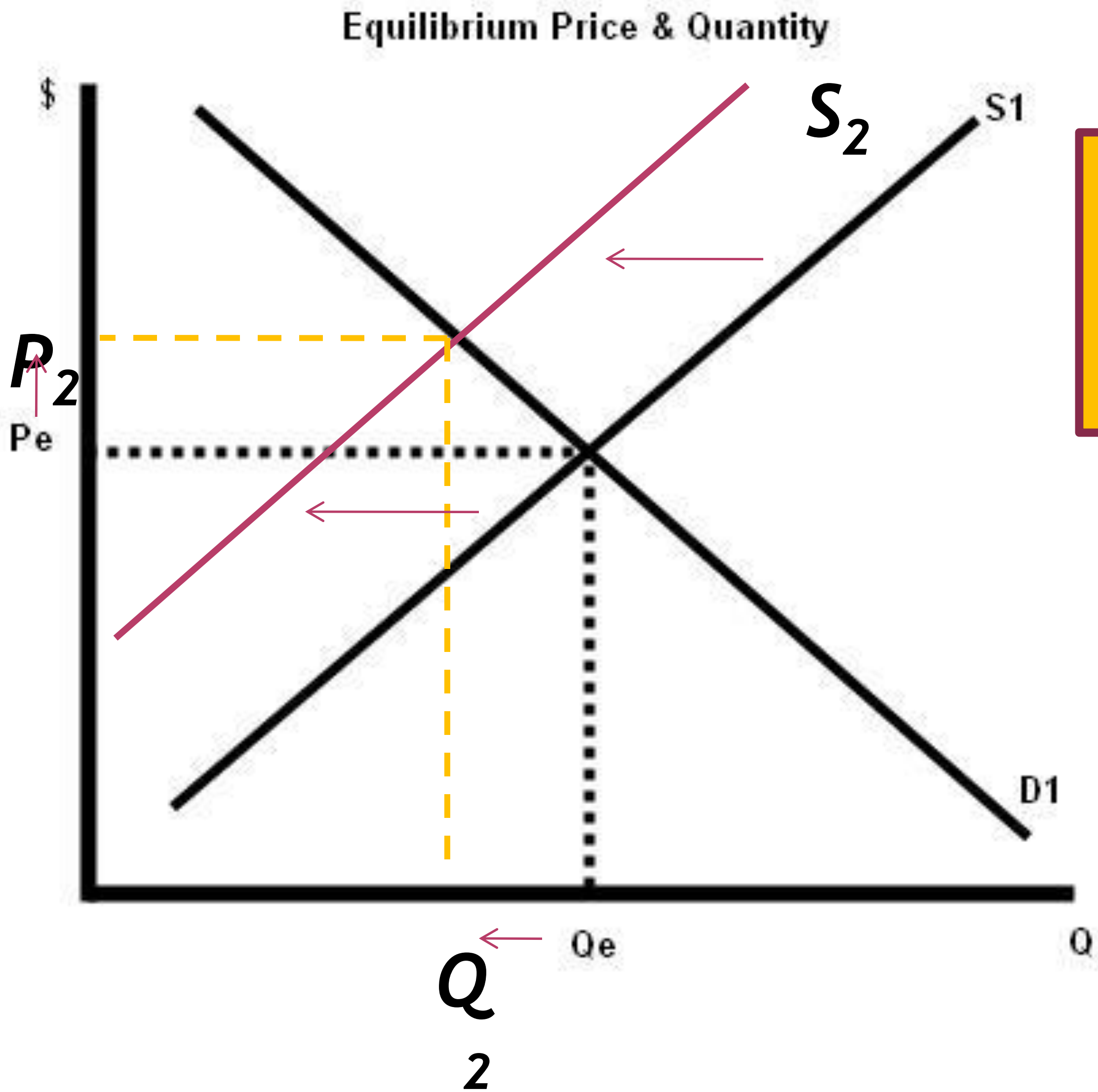




IF SUPPLY INCREASES…



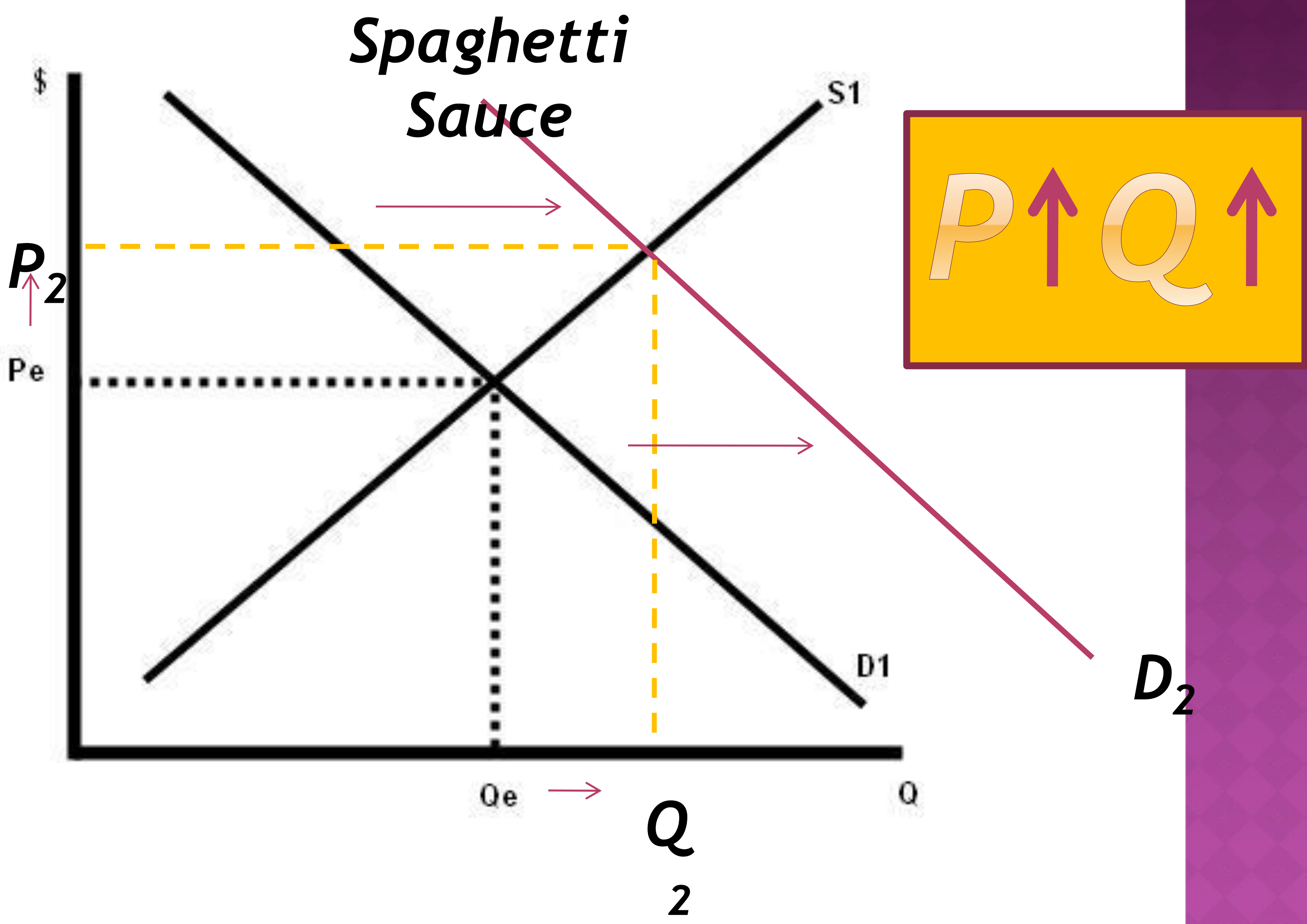
IF SUPPLY DECREASES…



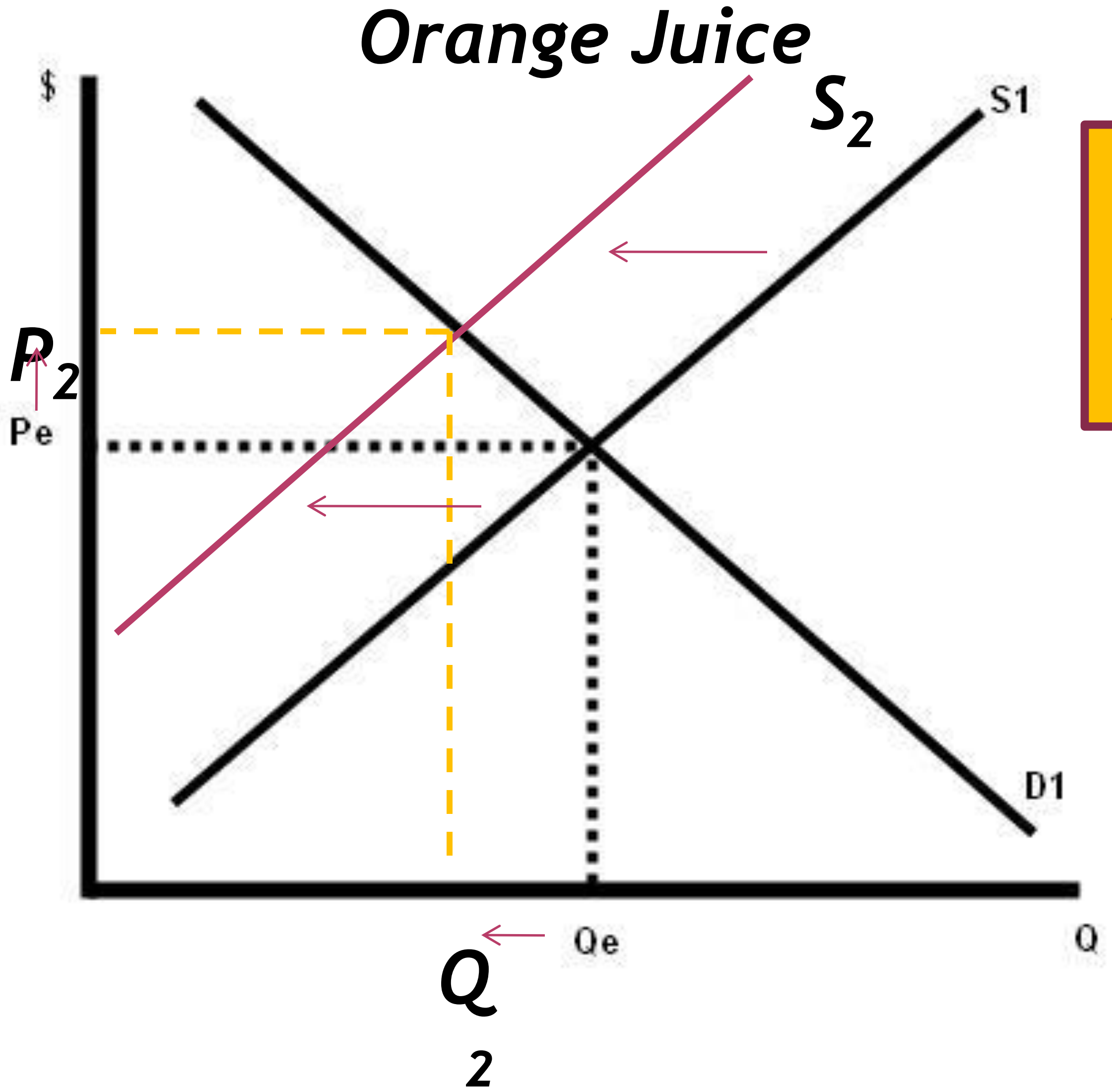
P↑Q↓

LET'S PRACTICE…

NATION'S LARGEST SPAGHETTI PRODUCER CUTS PASTA PRICES

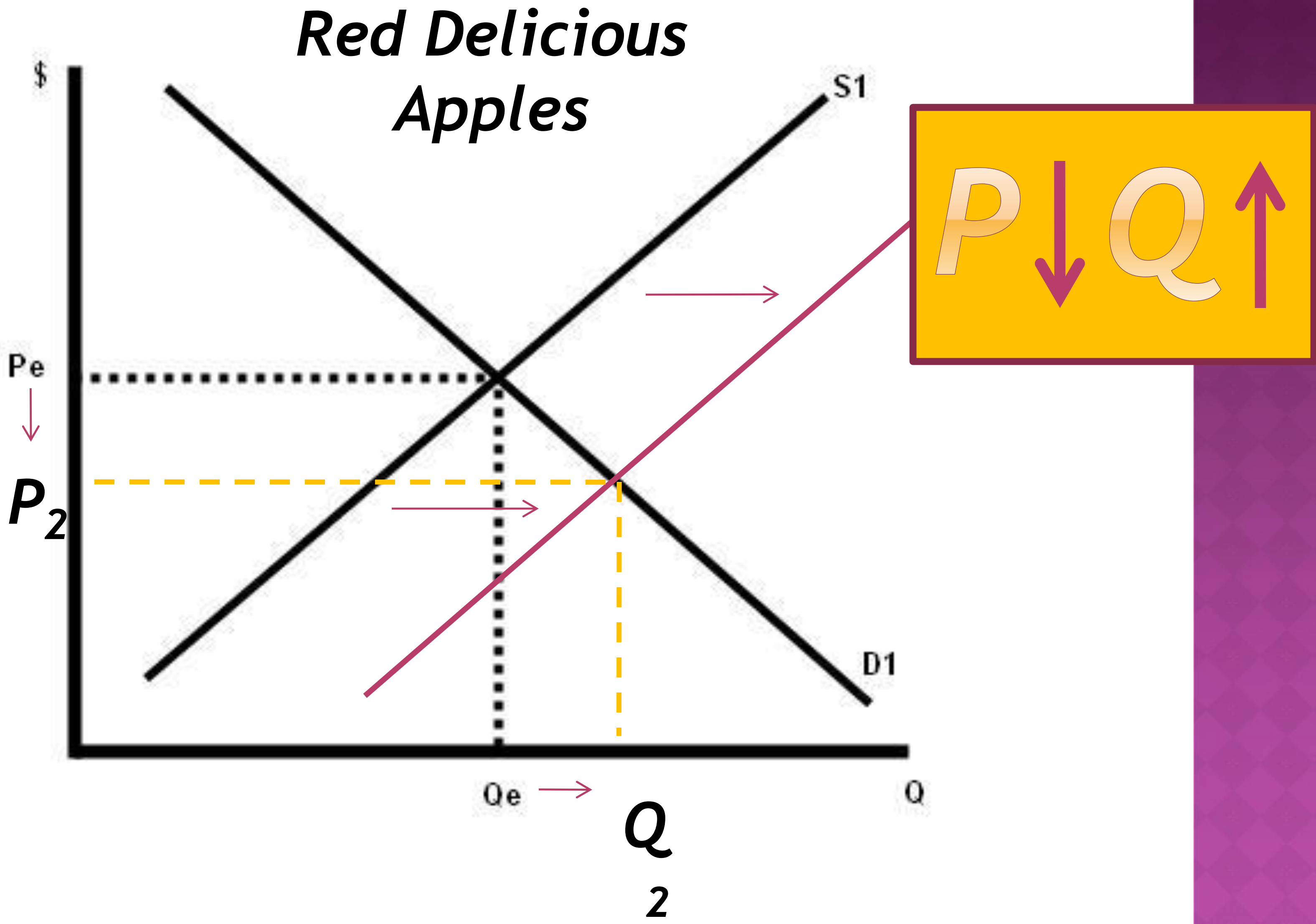


SUBZERO TEMPERATURES DESTROY MUCH OF FLORIDA'S CITRUS CROP

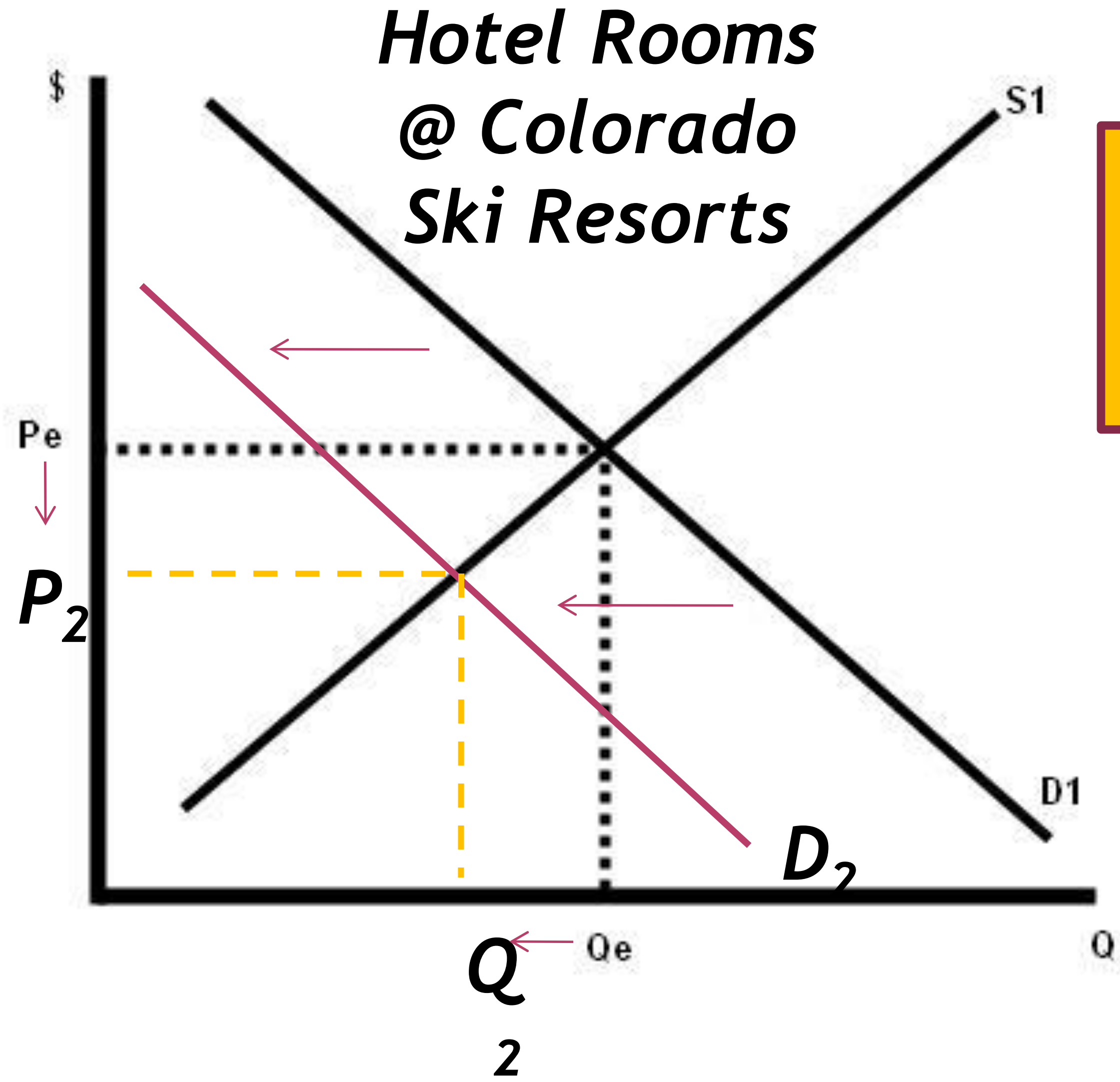


P↑Q↓

FARMER INVENTS NEW PICKING MACHINE – HARVESTS APPLES IN HALF THE TIME



COLORADO SKI RESORTS ANNOUNCE 50% INCREASE IN LIFT TICKET PRICES



P↓Q↓

SIMULTANEOUS SHIFTS OF SUPPLY AND DEMAND

We can make the following predictions about the outcome when the supply and demand curves shift simultaneously:

Simultaneous Shifts of Supply and Demand	**Supply Increases**	**Supply Decreases**
Demand Increases	Price: ambiguous Quantity: up	Price: up Quantity: ambiguous
Demand Decreases	Price: down Quantity: ambiguous	Price: ambiguous Quantity: down

SAMPLE QUESTION

If a normal good is produced in a competitive market, which of the following combinations of events could cause the price of the good to increase and the change in quantity to be ambiguous?

A) An increase in the average income of consumers and an increase in the number of producing firms.

B) An increase in the average income of consumers and an increase in the price of a variable input.

C) An increase in the price of a substitute good and an increase in the number of producing firms.

D) A decrease in the number of consumers and a decrease in the price of a variable input.

E) A decrease in the average income of consumers and an increase in the number of producing firms.