iClicker Pop Quiz 3
Modules 7 – 8

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Question 1

An increase in the consumer surplus in the market for milkshakes may result from a(n) _____ in the _____ of milkshakes.

(a) increase; price
(b) increase; supply
(c) decrease; demand
(d) decrease; supply

Question 1

An increase in the consumer surplus in the market for milkshakes may result from a(n) _____ in the _____ of milkshakes.

(a) increase; price

(b) **increase; supply** - Increase in supply means decrease in price which results in consumer surplus (consumers pay less than they were willing to pay).

(c) decrease; demand

(d) decrease; supply

Question 2

If the price of beef rises significantly, what will happen in the market for fast-food hamburgers assuming nothing else happens in the market?

(a) Supply increases, pushing prices higher.
(b) Supply decreases, pushing prices higher.
(c) Supply decreases, pushing prices lower.
(d) Supply increases, pushing prices lower.

Question 2

If the price of beef rises significantly, what will happen in the market for fast-food hamburgers assuming nothing else happens in the market?

(a) Supply increases, pushing prices higher.

(b) **Supply decreases, pushing prices higher.** - Price of hamburger depends on beef price. So, increase in beef price will result in a decrease in supply of hamburgers which further pushes the prices up.

(c) Supply decreases, pushing prices lower.

(d) Supply increases, pushing prices lower.

Question 3

Since nearly all smartphones have built-in cameras, what will happen to the market for traditional cameras?

(a) Demand for traditional cameras will fall, pushing prices higher.
(b) Demand for traditional cameras will fall, pushing prices lower.
(c) Demand for traditional cameras will rise, pushing prices higher.
(d) Demand for traditional cameras will rise, pushing prices lower.

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(b) **Demand for traditional cameras will fall, pushing prices lower.**
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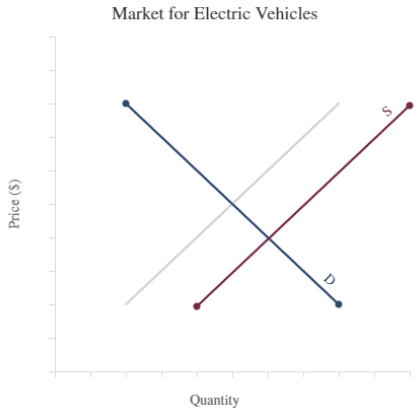
Question 4

The accompanying graph depicts a market for electric vehicles (EVs). Demonstrate the effect of a reduction in the price of lithium-ion batteries (an input for EVs) by adjusting the accompanying diagram. Equilibrium price _____.



(a) increases
(b) decreases
(c) does not change.

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(a) increases

(b) **decreases**

(c) does not change.

Question 5

Exam 1 is scheduled for this Thursday, September 24^{th} , 2020 between 1pm and 5pm, and the exam will be administered through Blackboard.

(a) True

(b) False

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(a) **True**

(b) False

Question 6

If the demand and supply curve for computers is:

$$D = 100 - 6P, S = 28 + 3P$$

Where P is the price of computers, what is the equilibrium quantity of computers bought and sold?

(a) (8,52)

(b) (8,24)

(c) (31,52)

(d) (31,24)

Question 6

If the demand and supply curve for computers is:

$$D = 100 - 6P, S = 28 + 3P$$

Where P is the price of computers, what is the equilibrium quantity of computers bought and sold?

(a) **(8,52)** - See Math Key below.

(b) (8,24)

(c) (31,52)

(d) (31,24)

Question-7

Here are the equations for the demand and supply curves:

Demand curve:

$$Q = 4200 - 2P$$

Supply curve:

$$S = 700 + 5P$$

What is the equilibrium Supply?

(a) 2500

(b) 3200

(c) 3500

(d) 5500

Question-7

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Demand curve:

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Supply curve:

$$S = 700 + 5P$$

What is the equilibrium Supply?

(a) 2500

(b) **3200** - See Math Key below.

(c) 3500

(d) 5500

Question 8

The table below shows the minimum price at which each of the students is willing to sell their one ticket to Phantom of the Opera. If the price for Phantom tickets is $140 and there is no other market for tickets, total producer surplus for these five students is:

Table: Producer Surplus and *Phantom* Tickets

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Student	Willingness to Sell
Tim	$ 1
Laura	30
Whitney	50
Ralph	100
Rick	150

(a) 379 dollars
(b) 291 dollars
(c) 369 dollars

Question 8

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Student	Willingness to Sell
Tim	$ 1
Laura	30
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(a) 379 dollars
(b) 291 dollars
(c) ~~360 dollars~~ - See Math Key below.

Question 9

Miranda and Jason are in the tutoring business. Miranda is willing to tutor as long as she gets $20 for her service, while Jason will not tutor unless he gets $35 for his service. If the most that someone would pay for tutoring is $30 dollars, how much producer surplus would be earned for each individual if they both have to tutor no matter what?

(a) Miranda = 10; Jason = -5

(b) Miranda = 20; Jason = -5

(c) Miranda = 10; Jason = 0

(d) Miranda = 20; Jason = 0

Question 9

Miranda and Jason are in the tutoring business. Miranda is willing to tutor as long as she gets $20 for her service, while Jason will not tutor unless he gets $35 for his service. If the most that someone would pay for tutoring is $30 dollars, how much producer surplus would be earned for each individual if they both have to tutor no matter what?

(a) **Miranda = 10; Jason = -5**

(b) Miranda = 20; Jason = -5

(c) Miranda = 10; Jason = 0

(d) Miranda = 20; Jason = 0

Question 10

Consider a market demand and market supply curve of,

$$P = 50 + (-5)Q^D$$

$$P = 10 + (10)Q^S$$

Please find the market equilibrium quantity demanded and supplied.

(a) $(Q^*, P^*) = (4\frac{2}{3}, \$20\frac{2}{3})$
(b) $(Q^*, P^*) = (2\frac{2}{3}, \$36\frac{2}{3})$
(c) $(Q^*, P^*) = (10\frac{1}{3}, \$36\frac{1}{3})$
(d) $(Q^*, P^*) = (0, 0)$

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(b) $\boldsymbol{(Q^*, P^*) = (2\frac{2}{3}, \$36\frac{2}{3})}$ - See Math Key below.

(c) $(Q^*, P^*) = (10\frac{1}{3}, \$36\frac{1}{3})$

(d) $(Q^*, P^*) = (0, 0)$

Quiz-3
Modules 7-8

Question 6

$D = 100 - 6P$, $S = 28 + 3P$

At equilibrium $D = S$

$100 - 6P = 28 + 3P$

$\Rightarrow 9P = 100 - 28$

$\Rightarrow 9P = 72$

$\Rightarrow P = \frac{72}{9} = 8$

Now, plug in the value of $P = 8$ into the demand/supply equation

$D^E = 100 - 48 = 52$

Equilibrium price = 8 and quantity = 52.

Question 7

$Q = 4200 - 2P$, $S = 700 + 5P$

$D = S \Rightarrow 4200 - 2P = 700 + 5P$

$\Rightarrow 7P = 3500$

$\Rightarrow P = 500 \leftarrow$ eq price

Equilibrium supply $= 700 + 2500 = 3200$

Question 8

Producer surplus $= (140 - 1) + (140 - 30) + (140 - 50$

$+ (140 - 100) +$ [illegible]

$= 139 + 110 + 90 + 40$ [illegible]

$= 379$ dollars

Question 9

Producer surplus for Miranda = 30 - 20 = 10

For Jasan = 30 - 35 = -5

Question 10

$50 - 5Q^D = 10 + 10Q^S$

$\Rightarrow 50 - 5Q^D = 10 + 10Q^D$ [$Q^D = Q^S$ at equilibrium]

$\Rightarrow 15Q^D = 40$

$\Rightarrow Q^D = \frac{40}{15} = \frac{8}{3} = 2\frac{2}{3}$

$P = 50 - 5 \times \frac{8}{3} = 50 - \frac{40}{3} = \frac{150-40}{3} = \frac{110}{3} = 36\frac{2}{3}$