Name _____Answer Key_____

You will be given 55 minutes to take Exam 1, after which we will trade.

(1) [*1 point*] The cost of producing one additional unit is referred to as _____, and the value of one additional unit is referred to as _____.[1] *Select all correct answers.*

(a) variable cost, variable value

(b) fixed cost, fixed value

(c) marginal cost, marginal value

(d) unit cost, unit value

(e) sympotic cost, sympotic value

(2) [*1 point*] _____ costs are defined as costs that change as production is varied, where _____ costs are defined as costs that stay the same regardless of how much is produced.[2] *Select all correct answers.*

(a) marginal, fixed

(b) variable, fixed

(c) marginal, variable

(d) fixed, variable

(e) fixed, marginal

(3) [*1 point*] If total profits equal $10,000 and fixed costs are $3,000, what is producer surplus?[3] *Select all correct answers.*

(a) $7,000

(b) $10,000

(c) $13,000

(d) $4,000

(e) $16,000

(f) none of the above

(4) [*1 point*] As fixed costs rise, the optimal quantity to produce and sell will[4] *Select all correct answers.*

(a) rise

(b) neither rise nor fall

(c) fall

[1] Multiple choice, from Practice Questions Set A, Homework 2, and Homework 3.
[2] Multiple choice, from Practice Questions Set A, Homework 2, and Homework 3.
[3] Multiple choice, from Practice Questions Set A and Homework 2.
[4] Multiple choice, from Practice Questions Set A and Homework 2.

(5) [*1 point*] Suppose the supply curve formula is: P = 2000 + 100(Q). If price equals $5,500, how many units will be produced?[5]

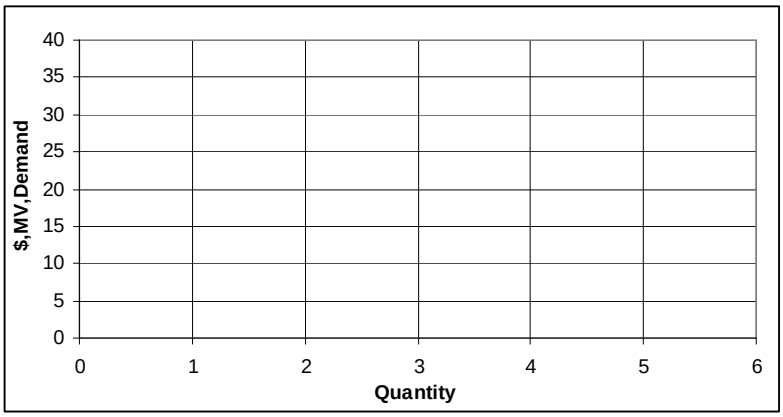
5500 = 2000 + 100(Q) Q = (5500-2000)/100 = 35

(6) [*1 point*] Following from the previous question, if price equals $5,500, what is producer surplus?[6]

PS = (1/2)(5500-2000)(35) = 61250

(7) [*1 point*] Below is a table showing the marginal value / demand for various quantities. Graph the relationship between marginal value and quantity. *Assume one can only consume and produce discrete units*.[7]

Quantity	Marginal Value / Demand
1	$35
2	$30
3	$25
4	$20
5	$15
6	$10



[5] Multiple choice, from Practice Questions Set A and Homework 2.
[6] Math question, from Practice Questions Set A and Homework 2.
[7] Graphing question from Practice Questions Set A

(8) [*1 point*] If the price is \$29, how many units will the buyer purchase? (*assuming discrete units*)[8]

2

(9) [*1 point*] If the price is \$29, given your answer to #8, what is consumer surplus? *(assuming discrete units, like in our trading game)*[9]

6 + 1 = 7

(10) [*1 point*] If the buyer is purchasing the good to consume herself, as opposed to a firm purchasing an input, what does consumer surplus measure?[10]

The happiness she receives from purchasing the product, where happiness is measured in dollars

(11) [*1 point*] This field of economic study concerns topics such as why the Great Depression occurred and what causes economic growth. *Circle the one appropriate field*.[11]

labor economics	environmental economics
microeconomics	macroeconomics
behavioral economics	agricultural economics

(12) [*1 point*] This field of economic study concerns topics such as how to reduce global warming at the lowest possible cost. *Circle the one appropriate field*.[12]

labor economics	environmental economics
microeconomics	macroeconomics
behavioral economics	agricultural economics

[8] Short answer question from Practice Questions Set A
[9] Short answer question from Practice Questions Set A
[10] Short answer question from Practice Questions Set A
[11] Multiple choice question from Homework 2.
[12] Multiple choice from Homework 2.

(13) [*1 point*] Why did the buffalo almost go extinct but the cow did not?[13] *Circle the one appropriate answer*

(a) because people only used buffalo for their hides, where cattle are used for meat also

(b) because there was clear ownership of cattle but not buffalo

(c) because buffalo were native to the U.S. but cattle were not

(d) because buffalo reproduce less efficiently as cattle

(14) [*1 point*] Suppose that wheat is grown in both Dodge City (DC) and Kansas City (KC). Assume that all wheat produced in both regions is ultimately utilized in KC and only in KC, meaning all DC wheat must find its way to KC. Suppose that we know the price in KC is $4.00 per bu, and the cost of transporting wheat between DC and KC is $0.10 per bushel. Then, if the *Force of One Price* holds, *Circle the one appropriate answer*[14]

(a) the price in DC must be $3.90

(b) the price in DC must be $4.10

(c) the price in DC must be equal to or between $3.90 and $4.10

(d) the price in DC must be less than or equal to $3.90

(e) the price in DC must be less than or equal to $4.10

(f) none of the above

(15) [*1 point*] Suppose that wheat is grown in both Dodge City (DC) and Kansas City (KC). Assume that wheat is "utilized" in both DC and KC, meaning at both locations wheat is processed into a consumer item. Suppose that we know the price in KC is $4.00 per bu, and the cost of transporting wheat between DC and KC is $0.10 per bushel. Then, if the *Force of One Price* holds, *Circle the one appropriate answer*[15]

(a) the price in DC must be $3.90

(b) the price in DC must be $4.10

(c) the price in DC must be equal to or between $3.90 and $4.10

(d) the price in DC must be less than or equal to $3.90

(e) the price in DC must be less than or equal to $4.10

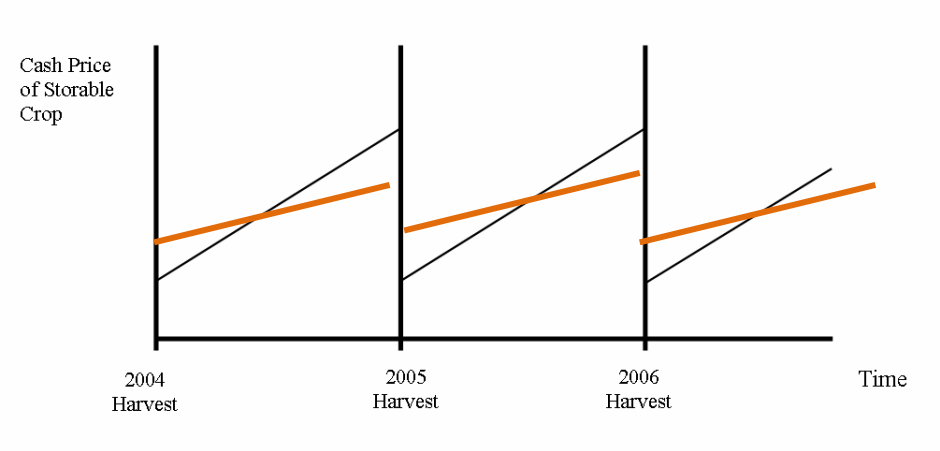
(f) none of the above

[13] Multiple choice from Homework 2.
[14] Multiple choice from Practice Problems Set B.
[15] Multiple choice from Practice Problems Set B.

(16) [*1 point*] Corn is harvested in November-December. Assume storage costs are $0.20 per bushel. It is currently January and the corn price is $3.10. Assume the Indifference Principle holds. What is the price of corn in the future months?[16]

	Corn Price
January	$3.10
February	3.30
March	3.50

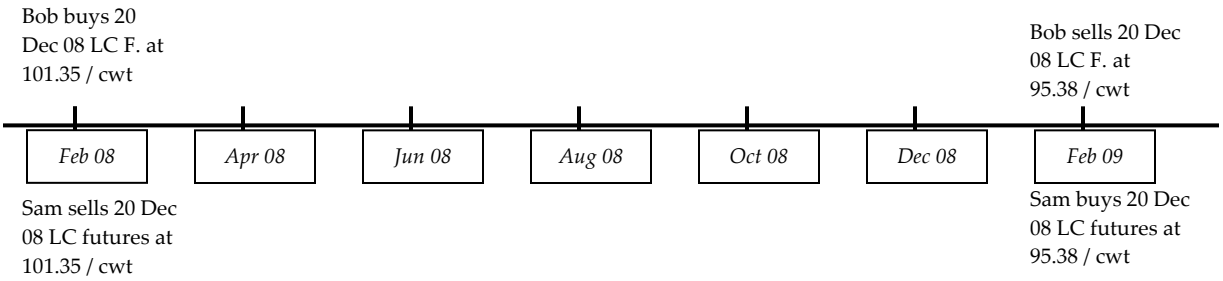
(17) [*1 point*] The graph below illustrates the behavior of crop prices between harvests. Illustrate how the graph would change if storage costs fell.[17]



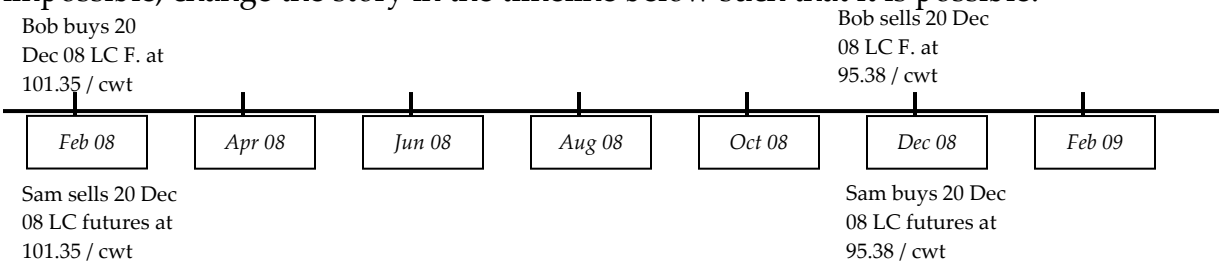
[16] Multiple choice from Practice Problems Set B.
[17] Multiple choice from Practice Problems Set B.

For the story below, indicate whether the story is possible or impossible, and if impossible, change the story such that it is possible. When changing an impossible story to a possible story, you may use "" to denote events that do not change.[18]

(18) [*1 point*] *December 08 Live Cattle (LC) Futures (1 contract = 40,000 lbs)*



The story above is (*circle one*) POSSIBLE / IMPOSSIBLE. If you answered impossible, change the story in the timeline below such that it is possible.



(19) [*1 point*] Beth purchased five May lean-hog contracts in January. One contract is 20,000 lbs of lean hogs. It is currently March. In March, Beth can fulfill her contract obligations by (*circle all that are correct*).[19]

(a) purchasing five March lean-hog futures contracts

(b) selling five March lean-hog futures contracts

(c) delivering 100,000 lbs of lean hogs to a futures transaction point

(d) accepting delivery of 100,000 lbs of lean hogs at a futures transaction point

(e) all of the above

(f) none of the above

[18] Short answer question from Practice Questions Set D.
[19] Multiple choice question from Practice Questions Set D.

(20) [*1 point*] Suppose Rick James sold two March03-corn contracts on February 6, 2003. It is currently March 15, 2003. He can fulfill his contract obligation by (*circle all that are correct*)[20]

(a) selling two March03-corn contracts at $2.50 / bushel

(b) selling two March03-corn contracts at $2.38 / bushel

(c) buying two March03-corn contracts at $2.50 / bushel

(d) buying two March03-corn contracts at $2.38 / bushel

(e) accepting delivery of corn and paying $2.38 / bushel.

(f) accepting delivery of corn and paying $2.50 / bushel.

(e) delivering corn and accepting $2.38 / bushel.

(f) delivering corn and accepting $2.50 / bushel.

Use the information below to answer questions 22-23

Contract	**Futures Prices on February 6, 2003**	**Futures Prices on March 15, 2003**
	Settlement Price ($ per bushel)	*Settlement Price ($ per bushel)*
March 03 Corn Futures Contract (5,000 bushels)	2.38	2.50
February 04 Corn Futures Contract (5,000 bushels)	2.44	2.62

(21) [*1 point*] Charlie Murphy sold five Feb04-corn futures on Feb 6, 2003. He offset those contracts on March 15, 2003. What are Charlie's speculating profits? Show your work.[21]

(2.44 – 2.62)(5)(5000) = -4,500

(22) [*1 point*] Statement: On February 6, 2003, the price of a Feb04-corn futures contract must equal (or at least be very close to) the spot price of corn.[22]

(*circle one*) *TRUE* or *FALSE*

(23) [*1 point*] Greater than 99% of all futures contract obligations are met by[23] *Select all correct answers.*

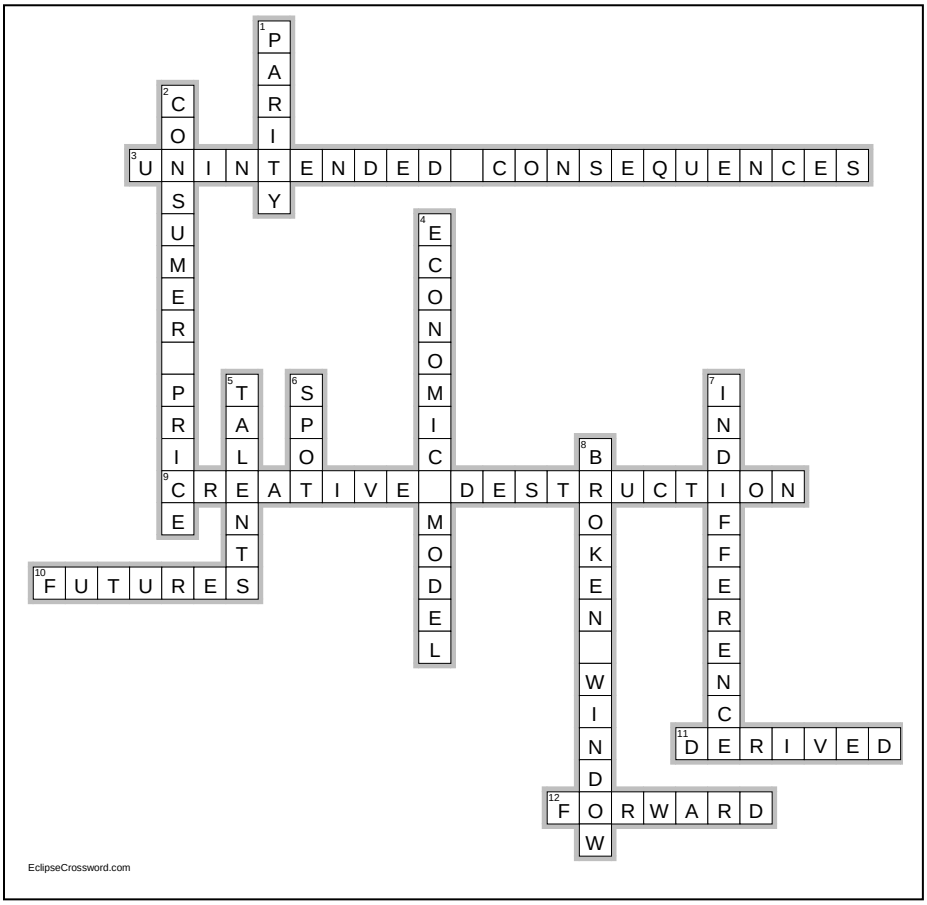
(a) offsetting

(b) accepting or making delivery

(c) canceling the contract

[20] Multiple choice question from Practice Questions Set D.
[21] Math question from Practice Questions Set D.
[22] True/false question from Practice Questions Set D.
[23] Multiple choice question from Practice Questions Set D.

(24) [*3 points*] Complete the following crossword puzzle. Some answers require two words. Be sure to leave a blank box between the two words.[24]



Across

3. The law of _____ _____ states that a government policy may create perverse incentives, leading to the opposite of the policy's intention.

9. _____ _____ describes the process by which jobs in one industry are destroyed in order to create jobs in another sector, making economies richer.

10. A _____ contract is a highly standardized forward contract backed by an organized exchange.

11. The demand curve for a good that is an input into a production process is referred to as a _____ demand curve.

12. A _____ contract is an agreement between two parties to trade a particular good and a later date, and at a mutually agreed upon price.

Down

1. A _____ price is a a nominal price that has the same purchasing power as a price in an another year.

2. The _____ _____ index is the most popular method of comparing prices and incomes in different time periods (e.g. 1962 and 2002)

4. An _____ _____ is a simplified version of the real world, where many complexities are assumed away to concentrate on a single question.

5. The Indifference Principle states that except for when people have special tastes or _____, all actions should be equally desirable.

6. A _____ or cash price refers to the price of goods traded right now.

7. The three I's of economic theory are incentives, interactions, and _____.

8. The _____ _____ fallacy states that destroying property produces greater economic wealth.

[24] Crossword puzzle from notes, homeworks, readings, and practice questions.

(25) [3 *points*] Explain why government subsidies, given explicitly to those who farm in the form of a direct check, may not actually benefit farmers. Articulate your answer clearly and thoroughly, using the concept of the Indifference Principle. You may assume that cropland is fixed or that cropland is plentiful, but make your assumption clear and ensure that your answer is consistent with your assumption. You may also assume that the "going salary" farmers could make in their next best alternative of work (e.g. industry labor) is fixed (because the industry is so large relative to the number of farmers). You will be graded on the accuracy, completeness, and clarity of your answer.[25]

There will not be an essay question on the retake of Exam 1

[25] Essay question on the Indifference Principle.