

Econ 2010 Morey: Fall 2018_Second Midterm Version 1

This exam has 54 questions and 14 pages. Make sure you have 54 questions.

The exam has two questions in it about the structure of the course. For each of these questions you answer, you will be marked correct, no matter how you answer. This gives you 2 correct answers out of 54 for free.

When answering a true/false question ignore the words “true” and “false” on the bubble sheets. That is, sometimes “true” will be bubble A and sometimes “true” will be bubble B.

Make sure you mark your bubble sheet Version 1

Note that many of the questions on this exam are variations on the questions you have seen on the Sapling quizzes or on the old exams. So, if a question looks familiar it might not be identical to a previous question. Read the questions carefully.

If you are asked to calculate an elasticity use the midpoint method.

1. Which statement best describes how the competitive firm chooses the input combination it will use to produce, in the long run, its chosen level of output.
 - A) It is determined by the isoquant map
 - B) It is determined by the price it can sell its output.
 - C) It is determined by the state of technical knowledge for producing its output, and the input prices it faces
 - D) It is determined by the input prices
2. Consider, as presented in class, Fred's production of snerd edibles. Remember that Fred is a competitive firm. It is the shortrun and there is only one variable input, hours of Lucas's time. To maximize her profits, Fred should decrease Lucas's hours worked if
 - A) The value of what Lucas produces if he works another hour is greater than his hourly wage rate.
 - B) The value of what Lucas produces if he works another hour is great than the price of edibles.
 - C) His hourly wage rate is greater than the value of what he produced in the last hour he has been working.
3. A question about your math skills and the math in the course. Which statement best describes you. (If you answer this question, it will be marked correct.)
 - A) I find the use of basic algebra helpful for understanding concepts and answering questions, but would not be pleased if, in addition, derivatives and partial derivatives were sometimes used to explain concepts and solve problems.

- B) I find the use of basic algebra helpful for understanding concepts and answering questions, and would be pleased if, in addition, derivatives and partial derivatives were sometimes used to explain concepts and solve problems.
- C) I struggle with the graphs and the math. My background in math is not strong enough given the level of graphs and math presented in class.
- D) I am comfortable with the graphs, but struggle with the equations. I would prefer the equations disappear or appear only in footnotes in the lecture notes.

Q3

A (42, 46.15%)

B (25, 27.47%)

C (13, 14.29%)

D (11, 12.09%)

4. Your budget **set** identifies _____. Your indifference **set** for bundle \mathbf{x}^i identifies _____.
- A) all those bundles that exhaust your budget; all those bundles that you rank equal to bundle \mathbf{x}^i
 - B) all those bundles that you can afford; all those bundles that you rank equal to or higher than bundle \mathbf{x}^i .
 - C) all those bundles that you can afford; all those bundles that you rank equal to bundle \mathbf{x}^i
5. The isocost line in producer theory is analogous to which of the following from consumer theory?
- A) An indifference curve
 - B) An isoquant
 - C) A budget line
 - D) None of the above
6. The production function in producer theory is analogous to the utility function in consumer theory: both identify maximum output as a function of what produces that output.
- A) This statement is correct.
 - B) This statement is incorrect
- Max output (utility) as a function of the input levels (amounts of each good consumed)
- Max output (units produced) as a function of input levels (amount of each production input used)
7. If there are no fixed costs, then the firm's average cost curve and its average variable cost curve are same curves.
- A) Yes
 - B) No

8. For a competitive firm, profits are necessarily maximized when production is at the level where average costs are minimized?
- A) Yes
 - B) No
9. From your perspective, the characteristics of a market good (e.g. that Coke is brown colored and has calories). are _____. (Choose the answer that is both correct and most informative.)
- A) endogenous
 - B) exogenous
 - C) exogenous, and determinants of choice.
 - D) it depends the market good in question.

You have no control over the characteristics of a market good (a Pepsi is a Pepsi). So, you can't change its color or number of calories per ounce. So, the levels of these characteristics are exogenous to you.

But they are determinants of your behavior. For example, whether you drink Coke or Pepsi, or whether you ski Eldora or Winter Park.

For the final, please understand the difference between endogenous and exogenous variables.

10. Assume there are only two commodities in this world: books by Marcel Proust (a famous French author) and books by the British Author E.L. James (One of his books is "Fifty Shades of Grey"). Given your tastes, books by James are, for you, perfect substitutes for books by Proust, and both are goods. Let P_P be the price of a book by Proust, and P_J be the price of a book by James. Your money income is M , and you face no other constraints. Which is more likely?
- A) You buy books by only one of the authors.
 - B) You buy books by both authors.
11. All I care about is publishing research papers and going skiing; I like doing both--the more the better. CU pays me \$35 a week (my income). Skiing costs \$9 a trip, and journals charge \$2 for each paper they publish- they always accept my papers. It takes me 10 hours to do a ski trip and 30 hours to write a paper. I have 150 hours a week to allocate to writing and skiing, and I can spend only \$35 on these two activities. Which of the following statements is both correct and most informative?
- A) I might ski 7 times
 - B) I might ski 3 times and write 4 papers.
 - C) I might ski 1 time and write 13 papers.

12. Consider a world with two goods: hummus and falafel. Ali loves falafel, the more the better, but is indifferent to the amount of hummus he eats. If the quantity of hummus is placed on the vertical axis and the quantity of falafels he eats is placed on the horizontal axis, which statement best describes the shape of Ali's indifference curve?
- A) vertical straight lines
 - B) upward sloping
 - C) horizontal straight line
 - D) downward sloping
13. You often read in micro-economics textbooks that shortrun profits are maximized at a level of output where price equals the marginal cost of production. Consider this assertion in the context of a firm that can sell as much, or as little, as it wants at some exogenous price, and where marginal cost is the same constant at every level of output (e.g. \$5). In this situation, the firm's profits will **necessarily** be maximized at a level of output where price equals the marginal cost of production? (Choose the answer that is both correct and most informative.)
- A) Yes
 - B) No
 - C) Yes--because there is always a level of output where price equals marginal cost.

Draw the graph. First draw the mc curve: a horizontal line at \$5, with \$ on the vertical axis. Since price is also exogenous, the price line is also a horizontal line.

These two lines will never cross if P does not equal MC.

If P is less than MC, the firm will produce zero.

If P is more than MC, the firm will produce an output of infinity (unlikely)

The big bolded **necessarily** is important. Typically, the competitive firm will choose an output level where $P=MC$, but not always.

Another example would be the Shortrun where MC is upward sloping and at the point where $p=mc$, p is less than average variable cost.

14. Consider, as presented in class, Fred's production of snerd edibles. Assume Fred's shortrun production function of producing edibles is $e=e(L)= 10(L)^{1/2}$, where L is labor. Which of the following is both correct and most informative? (note that $X^{1/2}$ means the square root of X). (You can figure this out by graphing the production function for a couple of different values of L.)
- A) The marginal product of labor is always declining.
 - B) The marginal product of labor is both always positive and always declining.

C) The marginal product of labor start positive be eventually becomes negative.

15. The prefix "iso" means equal?

- A) Correct
- B) Incorrect

16. The following is the "definition" of a cost function: The cost function identifies the amount of money a firm **spends producing its output** as a function of its output level, the prices of the inputs, and the quantities of the fixed inputs.

- A) Correct
- B) Incorrect

The cost function identifies the **minimum** cost of producing each level of output. But as discussed in class, the firm can spend more than this (be stupid).

This question has been asked numerous times on old exams.

Question 27 answers this question.

17. I have taken at least one calculus course. (If you answer this question, it will be marked correct.)

- A) No
- B) not sure
- C) Yes

Q17 **A (32, 35.16%)** **B (6, 6.59%)** **C (53, 58.24%)**

18. Horton the elephant LOVES peanuts (more are always preferred to less) and he HATES mice (fewer are always preferred to more). Horton lives in a world of two items, mice and peanuts. Given his preferences, rank the following baskets.

Basket I= 7 peanuts and 2 mice
Basket II= 2 peanuts and 2 mice
Basket III= 7 peanuts and 1 mouse
Basket IV=5 peanuts and 2 mice

- A) IV>III~II~I
- B) III>I>IV>II
- C) II>I>IV>III The answer was incorrectly coded as this one.

D) III>IV>II~I

Almost everyone got this one correct. GREAT. This question is a modified version of the Horton questions on old exams.

More peanuts are always preferred to less

Fewer mice are always preferred to more.

So if a basket A has the more peanuts than B, and the same amount mice, A will be ranked higher. Etc. Etc.

So, Basket III is preferred to Basket I (same number of peanuts but fewer mice)

Basket IV is preferred to Basket II (more peanuts, fewer mice)

Basket III is preferred to Basket IV (more peanuts, fewer mice)

Basket I is preferred to Basket IV (more peanuts, same mice)

So

III>I>IV>II

Since the answer was coded incorrectly, add one correct answer to your number of correct answers.

19. Imagine that everyone wants to produce a 3 hamburger patties a day (each a quarter pounder). There are only two inputs: unprocessed sides of beef (measure in pounds) and knives (measured in units).

$(P_{b1}/P_{k1}) > (P_{b2}/P_{k2})$,

where 1 is country 1, 2 is country 2, P_{b1} is the per-pound price of beef in Country 1, and P_{k2} is the price of a knife in Country 2. Assume the isoquant for producing three patties has the standard shape (negatively sloped but becoming flatter as b is increased-- b on the horizontal axis, k on the vertical. Assume both countries produce the three patties in the minimum-cost way. (Choose the statement that is both correct and most informative.)

A) Country 2 will use more knives than will Country 1 to produce the three patties

- B) Country 1 will use more knives than will Country 2 to produce the three patties.

We did this question in the class before this midterm: the part about how the cost minimizing way to produce a specific output (e.g. a 70-degree house) depends on the relative price of the inputs (in on part of the lecture: oil and insulation)

In country 1, beef is relatively more expensive (knives relatively less expensive)
In country 2, beef is relatively less expensive (knives relatively more expensive)

So, country 1 will, compared to country 2, uses less beef and more knives.

Draw an isoquant for 3 patties (beef on horizontal knives on vertical)
Then draw an isocost line tangent to your isoquant curve.

The equation for the isocost line is $m = pb(b) + pk(k)$, so $k = (m/pk) - (pb/pk)b$ is the graph of the isocost line with k on the vertical axis.

The slope of this isocost line is (pb/pk) . The higher the relative price of beef, the steeper the line.

So, draw two isocost lines (beef relatively expensive, beef relatively cheap compared to knives)

each tangent to the isoquant curve, but one steeper than the other.

The steeper one reflects a lower relative price for knives.

20. According to the consumer theory taught in class, if all market commodities are goods, the individual will necessarily choose a bundle on his or her budget line.

- A) Yes, this follows
B) No, this does not follow

21. Fabio wants to get exactly 70% on the final. Fabio produces the exam score using two inputs: hours of study time and milligrams of a drug that helps him to concentrate.

Which of the following statements is both necessarily correct and most informative

- A) His isoquant for producing a 70% score identifies all the combinations of study time and drugs that would just **produce** a score of 70%
B) His isoquant for producing the 70% score identifies all the different ways he would **prefer** to achieve a 70% score.

- C) His indifference curve for producing the 70% result identifies all those combinations of study hours and milligrams of drugs that will just get him a score of 70%.

B is incorrect because isoquants are about what is possible in terms of production, not preferences

C is incorrect because indifference curves are about preference, not what is possible in terms of production

22. Bob's demand function for gas is $G_b^D = .01Y$ where Y is his income. What is his income elasticity of demand in the range $Y=100$ to $Y=200$? Use the midpoint method.
- A) There is not enough information provided to calculate the income elasticity.
B) $2/3$
C) 1
D) -1

If income increase from 100 to 200, demand increases from 1 to 2.

The income increase in percentage terms is $(200-100)/150=10/15=2/3$

The demand increase in percentage terms is $(2-1)/1.5=1/1.5=2/3$

23. Ali's marginal rate of substitution of candy for (in place of) disco dancing (for Ali, both goods) is, in absolute value, his WTP for another piece of candy, expressed in terms of forgone dancing.
- A) Correct
B) Incorrect
24. The statement that bundle \mathbf{x}^j is weakly preferred to bundle \mathbf{x}^i means
- A) bundle \mathbf{x}^j is ranked the same as bundle \mathbf{x}^i
B) bundle \mathbf{x}^j is ranked higher than bundle \mathbf{x}^i
C) bundle \mathbf{x}^j is not ranked lower than bundle \mathbf{x}^i

Bundle \mathbf{x}^j weakly preferred to \mathbf{x}^i means \mathbf{x}^j is ranked either higher than \mathbf{x}^i or it has the same rank.

It does not mean necc. ranked the same (indifference) so A is wrong.

It does not mean necc. ranked higher (strongly preferred), so B is wrong.

C is simply another way of defining weakly preferred.

25. Every good has two prices: its price in blue money and its price in red money. When you buy a good you have to pay both prices. Assume there are only two **goods**: pet snakes and chocolate. Assume the blue money price of snakes is 4 blue dollars, and 2 blue dollars for chocolate. Assume the red money price of snakes is 2 red dollars, and 4 red dollars for chocolate. E.g. if the blue money price for snakes is 4 and the red money price is 2, you have to hand over 4 blue dollars and 2 red dollars to get another snake. You start with 12 blue dollars and 12 red dollars. (Assume chocolate on the vertical axis and snakes on the horizontal axis. Assume you are currently buying 2 chocolates and two snakes. (Note that 2 chocolates and two snakes cost 12 blue and 12 red dollars.) How many chocolates will you have to give up to get another snake? (I might draw the two budget lines--snakes on the horizontal axis).
- A) 1 chocolate
 - B) 2 chocolates

26. Imagine a world of two commodities: pollution (a bad) and a good. Betty and Bob have the same preferences, face the same prices, and each has the same amount of income. Neither faces any other constraints. Their WTP to reduce pollution by one unit (in terms of forgone goods) is
- A) necessarily the same.
 - B) not necessarily the same.

27. In the definitions of a cost function, why is the adjective "minimum" important? (Choose the answer that is both correct and most informative.)
- A) It is not important. The adjective "minimum" cost does not even appear in the definition of a cost function, so, obviously, it is not important,
 - B) It is important because the firm is constrained to produce its chosen output in the minimum cost way.
 - C) Because a firm could produce output x in a way that does not minimize the cost of producing x , and the cost function identifies minimum costs, which is not necessarily the firm's actual costs.
 - D) Minimum cost is necessarily zero.

[Compare this question with the earlier cost question that many of you got incorrect.](#)

28. After spending his **second hour** with Mickey, Donald's insanity increased by 120%.-- Mickey, as in Mickey Mouse. Which of the following statements is both correct and most informative?
- A) In this range, the time-with-Mickey elasticity of Donald's insanity is positive but inelastic
 - B) In this range, the Donald's-insanity elasticity of time-with-Mickey is positive but inelastic

- C) In this range, the Donald's-insanity elasticity of time-with-Mickey is positive and elastic.
- D) In this range, the time-with-Mickey elasticity of Donald's insanity is positive and elastic

This question might need a bit of work. Time with Mickey cause Donald's insanity to increase, so it seems that A (time with Mickey) causes B (insanity in Donald)

This makes the T.A.s and I think about the percentage change in Donald's insanity divided by the percentage change in the time Donald spends with Mickey.

Which is the time-with-Mickey elasticity of Donald's insanity.

This is positive and greater than 1 (1.2) so we choose D.

But B is also a correct statement. It, however is not as informative.

I will think more about this question.

29. In a world of only two commodities, both goods (more always preferred to less), indifference curves can have sections that are vertical or horizontal, or both.
- A) This statement is correct.
 - B) This statement is not correct.

In sections that are vertical (or horizontal) more is not preferred to less.

30. Suppose we have the following cost function for snerd edibles: $c(e,w) = we^2$ where e is the number of edibles produced and w is the wage rate. If the wage is currently set at $w = \$5$ what is the marginal cost of producing the 2nd unit?
- A) 20
 - B) 15
 - C) 27
 - D) 16

31. (**Recently in the News**) Barley is a major input in the production of Beer. A study was recently published that indicated that global warming would greatly reduce the production of barley, so lead to a big increase in the price of barley. Global warming will also increase the demand for beer at every beer price: when it hot people drink more. Which of the following statements is both correct and most informative"
- A) The equilibrium price and quantity of beer will increase
 - B) The equilibrium price of beer will increase

- C) The equilibrium quantity of beer will decrease.
 - D) The equilibrium price will increase, and the equilibrium quantity will decrease.
 - E) The equilibrium price of beer will increase, but without more information we don't know if the equilibrium quantity will increase or decrease
32. Larry the Liberal loves Elizabeth Warren and ranks **every** bundle with Elizabeth as President higher than every bundle where Elizabeth is not President. Given this, evaluate the following statement. "Larry would starve his kids if it was the only way to get Elizabeth elected. (Choose the answer that is both correct and most informative.)
- A) The quoted statement does not logically follow from what is assumed.
 - B) There is no enough information to determine whether the quoted statement logically follows from what is assumed.
 - C) The quoted statement logically follows from what is assumed.
33. In one set of lecture notes about the competitive firm, we looked at an example where Professor Morey's daughter, Fred, was paid \$1 per mile skied. Fred's only cost was the value of her time, \$3 an hour. In order to maximize her profit, Fred will ski up the point where her marginal cost equals \$3.
- A) Correct
 - B) Incorrect
34. Consider Fred the skier who is producing ski miles using two variable inputs: her time and cans of Red Bull (a drink packed with caffeine). Might, at some levels of use, the marginal product of Red Bull (in the production of ski miles) be negative?
- A) Yes
 - B) No
35. A firm's cost function identifies the state of technical knowledge for producing the firm's output.
- A) Correct
 - B) Incorrect
36. Imagine that a dry cleaner's maximum output depends on three things: the amount of labor it uses, the amount of capital it uses, and the amount of air pollution in the neighborhood. It is the shortrun and the firm is constrained to use a fixed amount of capital. All else constant, the more labor the firm uses the **more** it produces, and, all else constant, the **more** polluted the neighborhood, the less output the firm produces. The firm's isoquant for their chosen level of output in terms of labor and pollution (Choose the answer that is both correct and most informative)
- A) must slope down

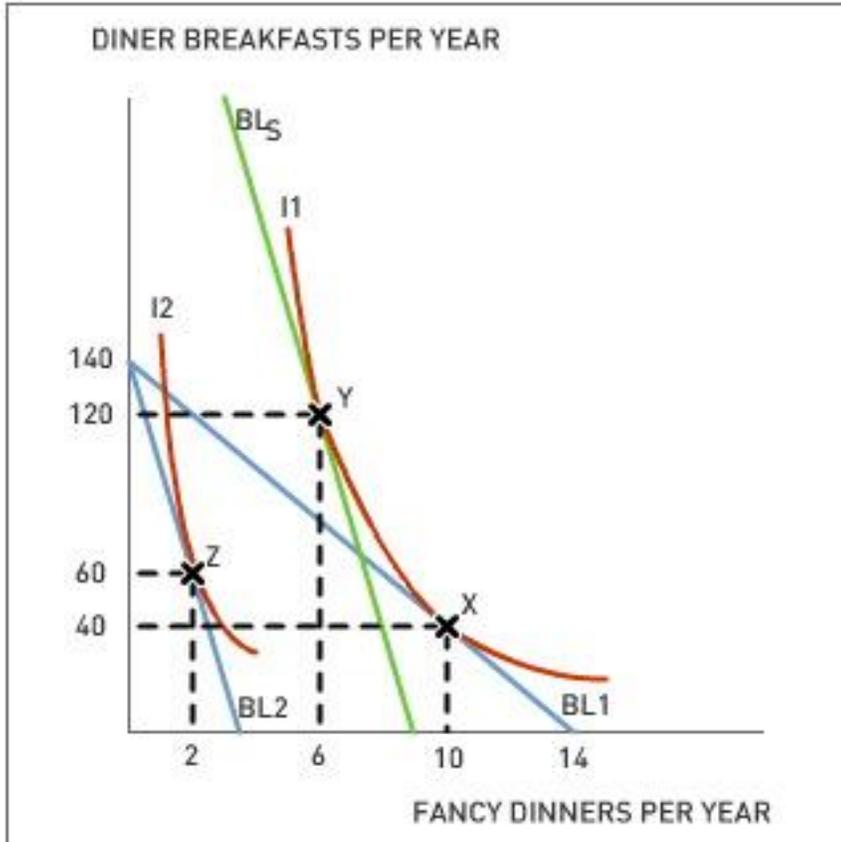
- B) must slope up
- C) most likely slope down
- D) most likely slope up.

Wasn't this a quiz question in class? If pollution increases, labor must increase to hold output constant.

37. Assume marginal cost is increasing. Average cost must be rising.
- A) Correct
 - B) Incorrect

Draw a u-shaped average cost curve, then add the mc curve. There will be a section where marginal cost is increasing, but still less than ac. In this range ac will still be declining even though marginal cost is increasing.

38. Paolo and Maria Rossi live in San Diego and enjoy going out to fancy restaurants for dinner and to diners for breakfast. On the following diagram, the curves I1 and I2 represent two of their indifference curves for fancy dinners versus diner breakfasts. Their total income to be spent on eating out is \$1,400 per year. The price of a diner breakfast is always \$10. BL1 is the budget line when dinners cost \$100, and BL2 is the budget line when dinners cost \$400. The lines BL2 and BLS are parallel, and BLS is the line tangent to I1 at point Y.



The substitution effect of the price increase, from \$100 to \$400 for each fancy dinner, causes them to go out to diners, for breakfast _____ times per year.

- A) 4 fewer
 - B) 80 fewer
 - C) 80 more
 - D) 12 fewer
39. Consider my dog, Giacomo. He cares about only two things: playing and eating. He always prefers an additional kilo of meat to an additional kilo of cheese. He always prefers additional playing tug to additional playing fetch. In fact, he does not like to play fetch. Bundles for Giacomo consist of different amounts of meat, cheese, tug time, and fetch time. If two bundles have the same amount of cheese, he will, for sure, rank higher, the one with more meat.
- A) This last statement follows from what was assumed.

- B) He might rank higher the one with more meat, but this does not follow from what was assumed.
- C) Giacomo will always rank a bundle with more meat higher than all bundles with less meat.

40. Suppose we spend some more time observing Wilbur and discover he lives in the mountains of Colorado and snowfall affects his demand for gasoline in the following way:

$$Q = 8 + .2Y - .75P^2 + .5S$$

Where Q is his demand for gas, S stands for annual snowfall in feet, Y is his income (in thousands) and P is the price of gasoline. Picture a graph of this relationship, demand on the horizontal axis, snowfall on the vertical axis. If snowfall decreases, this demand function for gas will shift to the right.

- A) Correct
- B) Incorrect: it will shift to the left.
- C) Incorrect: it will not shift.

You have to figure out when the effect is a movement along a graphed curve vs. a shift in the graph.

The graph has snow on one axis and demand on the other.

So, if snow changes it is a movement along the graphed curve because snow is on one of the axis.

If Y or P changes this graph shifts.

41. Assume marginal cost is greater than average cost and marginal cost is increasing. Average cost must be rising.

- A) Correct
- B) Incorrect

42. There are two commodities in the world, pancakes (p) and sausage links (s). Joe's Utility function is

$U(p,s) = 3p + 2s$. How many pancakes must Joe give up if he is to gain one more sausage while staying on the same indifference curve?

- A) 3/2
- B) 2/3
- C) 3
- D) 2

43. Marginal cost is the change in:
- A) total cost resulting from a one-unit change in a variable input.
 - B) total cost resulting from a one-unit change in output.
44. Imagine Fred is producing a profit-maximizing number of edibles, this is a positive amount of edibles, and Fred is making a profit. Fred has no fixed costs.

Now consider the exact same situation but with a fixed cost of \$2.

(Which of the following statements is both correct and most informative.)

- A) With the fixed cost, Fred's profit maximizing level of output will be less.
- B) With this fixed cost, Fred's profit-maximizing level of output will be the same.

We did this in class. Make sure you understand for the final.

45. Consider, as presented in class, Fred's production of snerd edibles. Remember that Fred is a competitive firm. It is the shortrun and there are two variable inputs (hours of Lucas's time, and cans of Red Bull). Fill in the blanks.

The marginal product of ____ in the production of ____ is how much ____ when ____ increases by one unit, holding constant ____

- A) Red Bull; snerd edibles; output; increases; Red Bull; the number of hours Lucas works.
- B) labor; snerd edibles; output; increases; labor, Red Bull
- C) Both of the other answers are correct.

46. Suppose we have estimated Wilbur's Demand function for gallons of gasoline as a function of his annual income and the price of a gallon of gasoline:

$$Q = 8 + .2Y - .75P^2$$

Where Q is quantity demanded of gallons of gasoline. Y is Wilbur's annual income in thousands of dollars. P is the price of a gallon of gasoline. If the price of gasoline is currently \$2 a gallon and Wilbur's income increases from 50 to 60 dollars per year what is his Income Elasticity of Demand?

- A) 7/16
- B) 1/44
- C) 11/16
- D) 23/11

47. Wilbur's ranking of bundles is simply a convenient way to keep track of how much utility Wilbur gets from each bundle.
- A) Correct
 - B) **Incorrect**

The statement is backward. CT does not assume people have utility, it assumes they rank bundles. The utility function is simply a convenient way to record the ranking.

48. Assume Nathan's demand function for gasoline is $G_n^D=4$ (He always buy 4 gallons a week). Nathan's price elasticity of demand for gas is
- A) -1
 - B) 0

49. Mary Jane lives in a world of only two commodities: joints (marijuana cigarettes) and workouts. The two goods are perfect substitutes: one workout is as good as two joints. Both goods are free and the amount of time it takes to smoke a joint and workout are the same. Unfortunately, Mary Jane cannot do both at the same time. Choose the answer that is both correct and most informative.
- A) Mary will spend her life working out and will never smoke a joint
 - B) Mary will be on the same indifference curve no matter what she does.
 - C) Mary will consume joints and workouts in the ratio two joints for each workout
 - D) Mary will spend her life smoking joints and never workout.

50. Imagine Bob in a world of only two commodities: a good (more is always preferred to less) and pollution (a bad: less is always preferred to more). Which statement about Bob's indifference curves is both correct and most informative? (pollution on the vertical axis, the good on the horizontal axis)
- A) They are downward sloping and more preferred bundles are to the north-east
 - B) They are upward sloping and more preferred bundles are to the south-east
 - C) They are upward sloping and more preferred bundles are to the north-west
 - D) Each indifference curve will have some positively-sloped sections and some negatively-sloped sections.
 - E) They are downward sloping and more preferred bundles are to the south-west

51. Minimizing the cost of producing the chosen level of output is a necessary but not a sufficient, condition for profit maximization.
- A) Correct
 - B) Incorrect

52. Wilma's utility function for the two goods x and y is $U=x^2y^5$. (Notice the size of the exponents) Given these preference, Wilma will consume more x than y ? (Choose the answer that is both correct and most informative.)
- A) Without more information it is impossible to tell.
 - B) Yes
 - C) No
53. Every good has two prices: its price in blue money and its price in red money. When you buy a good you have to pay both prices. E.g. if the blue money price is 5 and the red money price is 2, you have to hand over 5 blue dollars and 2 red dollars. You start with 10 blue dollars and 10 red dollars. How many units of the good can you afford?
- A) 2
 - B) 4
 - C) 3
 - D) 1

If I ask this question again, I will leave out the “E.g. if”

To answer the question, you have to assume that the blue money price is 5 and the red money price is 2.

54. Suppose Hobo Hank spends his money on two goods; cigarettes and alcohol, and he is currently consuming some of both. His indifference curves are downward sloping getting less steep as the number of cigarettes smoked increases (cigarettes on the horizontal axis, alcohol on the vertical). Then, a tax is imposed on alcohol that increases their price. After the tax is implemented, Hobo Hank is worse off, and expresses his concerns on a cardboard sign to elicit sympathy. This causes his panhandling income to increase just enough to get him back to his pre-tax indifference curve. We would expect:
- A) His consumption of cigarettes to decrease and his consumption of alcohol is ambiguous
 - B) His consumption of cigarettes to decrease and his consumption of alcohol to increase
 - C) His consumption of cigarettes and alcohol to increase

- D) His consumption of cigarettes to increase and his consumption of alcohol to decrease

This question, like an earlier question is about income affect and substitution affect.

The tax on booze increases the price of booze. There is a substitution effect (relative price of booze increases) and an income effect (the are bundles that he could previously afford, but now cannot)

The handouts eliminate the income effect (get him back to his initial indifference curve.

But his budget line is steeper (alcohol is now relatively more expensive)

Give what was assumed about the shape of his indifference curves, he will smoke more and drink less.

Answer Key

1. C
2. C
3. *(No Answer Provided)*
4. C
5. C
6. A
7. A
8. B
9. C
10. A
11. B
12. A
13. B
14. B
15. A
16. B
17. A, B, C
18. C
19. B
20. A
21. A
22. C
23. A
24. C
25. B
26. A
27. C
28. D
29. B
30. B
31. E
32. C
33. B
34. A
35. A
36. B
37. B
38. C
39. B
40. C
41. A
42. B
43. B
44. B

- 45. C
- 46. C
- 47. B
- 48. B
- 49. A
- 50. B
- 51. A
- 52. A
- 53. A
- 54. D