Exam 1

ECON 101-002

Summer 2017

Name: _____

ONYEN: _____

PID: _____

Honor Code Signature: _____

Multiple Choice [2.5 pts each]

Choose the option that best answers the question given.

1. Table 1 shows the quantity supplied and demanded at certain prices.

Table 1: Prices and Quantities

Price	Q_d	Q_s
$10	50	30
$12	45	35
$14	40	40
$16	35	45
$18	30	50

If there is currently a surplus of 15 units, then the price in the market must be

    (a) less than $14.

    (b) greater than $14, but less than $16.

    (c) greater than $16, but less than $18.
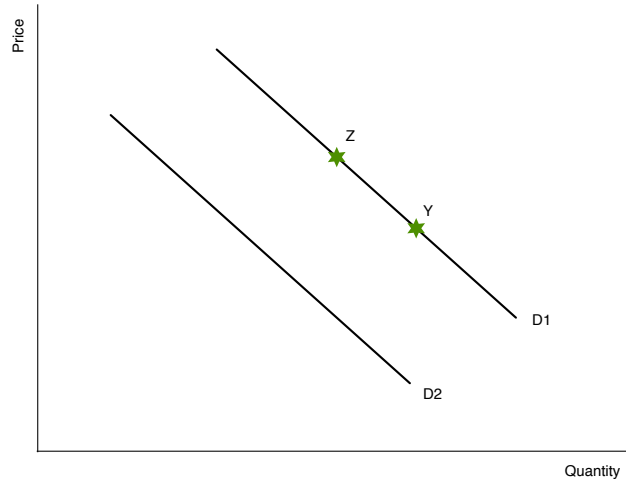
    (d) greater than $18.

2. Refer to Figure 1.

Figure 1: Demand for Shrimp

All else equal, an increase in the income of buyers who consider shrimp to be an inferior good would cause a move from

    (a) D1 to D2.

    (b) Y to Z.

    (c) Z to Y.

    (d) D2 to D1.

3. A non-congested toll road is a _____because it is _____.

    (a) common resource; excludable and rival

    (b) private good; excludable and rival

    (c) public good; non-excludable and non-rival

    (d) club good; excludable and non-rival

4. Since chocolate chip cookies and oatmeal raisin cookies are substitutes, the cross-price elasticity of demand between the goods is

    (a) negative.

    (b) zero.

    (c) positive.

    (d) impossible to discern without more information.

5. Chocolate chip cookies and milk are complements. If the supply of chocolate chip cookies decreases, then the equilibrium price of milk will _____and the equilibrium quantity will _____.

    (a) increase; decrease
    (b) decrease; decrease
    (c) decrease; increase
    (d) increase; increase

6. The government of Tarheelia is debating over how to fund national defense, a public good. There are 40 individuals in the country, and each person places a value of \$0.30 on each dollar spent on national defense.

   Under policy 1, the government asks individuals to voluntarily contribute towards the national defense fund. Under policy 2, a \$15 tax would be imposed on each individual. Individuals would each contribute _____towards national defense under policy 1, while under policy 2 individuals would be _____better/worse off relative to policy 1.

    (a) \$0; \$180
    (b) \$0; \$165
    (c) \$0.30; −\$15
    (d) \$0; −\$15
    (e) \$0.30; \$165

7. The United States currently produces guns and butter. Table 2 shows possible combinations of the two goods the US can produce in a given week (in thousands).

Table 2: Weekly Production of Guns and Butter

Guns	Butter
8	50
x	40
18	30

   If resources in the US are specialized such that some are better suited to producing guns and others are better suited for butter production, then a possible value for x might be

    (a) 10
    (b) 12
    (c) 13
    (d) 16

Refer to Figure 2, which shows the market for laptop computers, for questions 8 - 10.
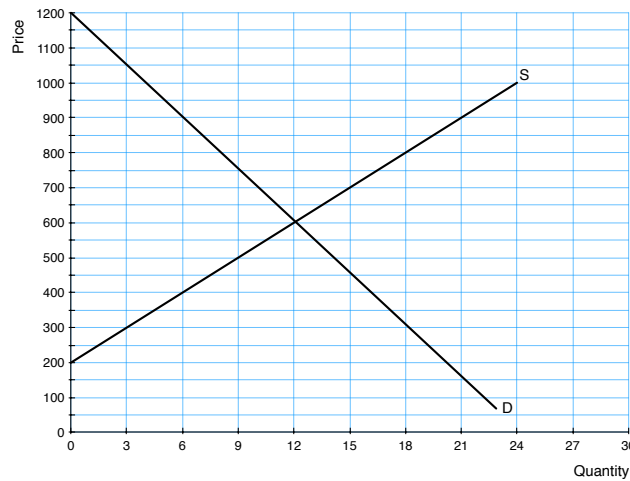

Figure 2: Market for Laptops

8. Suppose the government imposes a tax on this market such that the quantity bought and sold after the tax is imposed is 9 laptops. Thus, the size of the per-unit tax is _____and the burden of the tax falls more heavily on _____.

   (a) $250; sellers

   (b) $750; buyers

   (c) $750; sellers

   (d) $250; buyers

9. As a result of this tax, consumer surplus in this market will

   (a) decrease by $4,050

   (b) decrease by $3,150

   (c) decrease by $1,575

   (d) decrease by $2,025.

10. The government decides to repeal the tax and instead provides a per-unit subsidy of $500 to consumers. As a result of the subsidy, the deadweight loss in the market will be

   (a) $1,500.

   (b) $2,000.

   (c) $3,000.

   (d) $2,500.

   (e) $0.
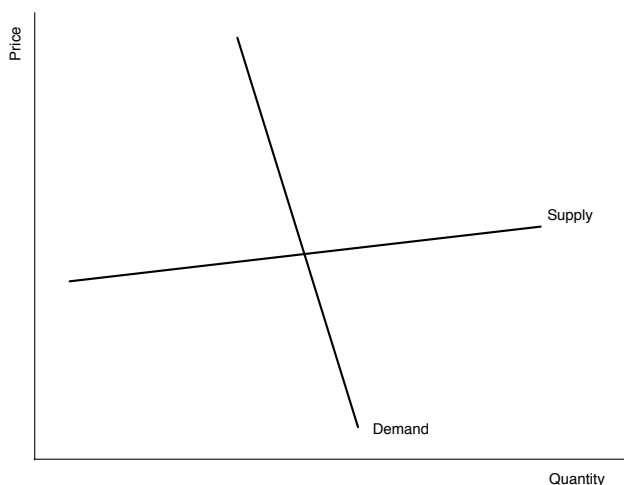
11. Consider Figure 3.

Price

Supply

Demand

Quantity

Figure 3: Market for Coke

If the government provides a $15 per unit subsidy on sellers in this market,

(a) the benefit of the subsidy will be split evenly between buyers and sellers in the market.

(b) the benefit of the subsidy will be greater for sellers than for buyers in the market.

(c) the benefit of the subsidy will be greater for buyers than for sellers in the market.

(d) the split of the subsidy benefit cannot be determined from this information.

12. Table 3 shows the willingness to pay and costs of five sellers and buyers in the market for new textbooks. Each buyer would like one textbook and each seller has one book to sell.

Table 3: WTP and Seller Costs for Textbooks

WTP	Seller Costs
$180	$85
$150	$150
$100	$100
$200	$125
$125	$60

If a price floor of $180 is imposed in this market, the deadweight loss incurred as a result of this price control is

(a) $0.

(b) $95.

(c) $50.

(d) $235.

(e) $180.

13. Figure 4 shows the demand curve for Fanta.

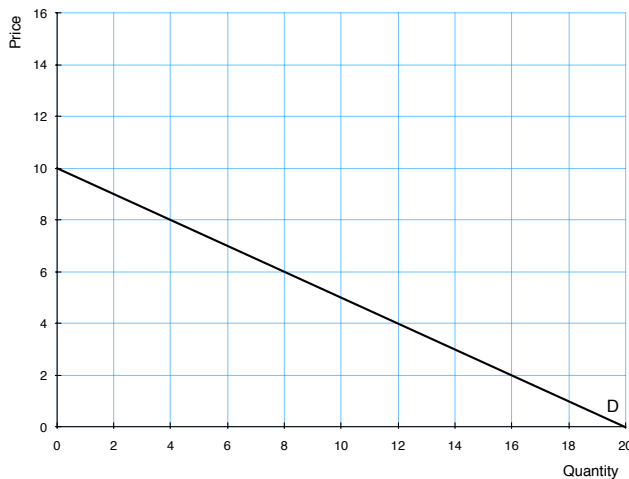Figure 4: Demand for Fanta

If the price of Fanta increases from $2 to $4, consumer surplus will

    (a) increase by $28.

    (b) decrease by $28.

    (c) decrease by $36.

    (d) increase by $36.

Use the following information to answer questions 14 - 15. Suppose we are studying a market where each unit bought and sold incurs an external cost of $3 on society. However, the sale of this good also provides an external benefit of $5 per unit.

14. In the absence of government intervention, the market will provide an amount

    (a) smaller than the efficient output level.

    (b) greater than the efficient output level.

    (c) equal to the efficient output level.

    (d) Not enough information given.

15. In order to induce the market to produce the efficient quantity, the government could

    (a) impose a $2 per-unit tax on sellers.

    (b) provide a $5 per-unit subsidy to buyers.

    (c) impose a $3 per-unit tax on buyers.

    (d) provide a $2 per-unit subisdy to buyers.

    (e) None of the above.
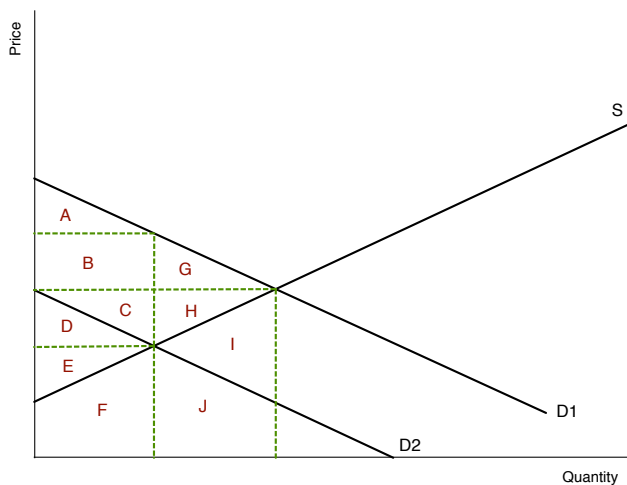
16. Consider Figure 5.

Figure 5: Market for Fanta

Suppose that the curve labeled D1 represents the social value curve in this market. In the absence of government intervention, total surplus in the market for Fanta is represented by the area

    (a) A + B + C + D + E

    (b) A + B + C + D + E + G + H

    (c) A + B + C + G + H + I

    (d) D + E

    (e) None of the above.

17. The market for Twist is currently at equilibrium and the price of the drink is \$1.00 per can. Under pressure from consumers, the government imposes a price ceiling of \$1.25 per can, leading to _____in producer surplus and _____in total surplus.

    (a) no change; an increase

    (b) no change; no change

    (c) an increase; an increase

    (d) a decrease; a decrease

    (e) a decrease; no change

18. If people purchase fewer beets when their incomes increase, then beets are a(n) _____good and its income elasticity of demand is _____.

    (a) normal; positive

    (b) inferior; positive

    (c) inferior; negative

    (d) normal; negative

Use Table 4, which shows the number of apples and pears Katie and Megan can produce in a day, and the information below to answer questions 19 - 21.

Table 4: Number of units harvested per day:

	Apple	Pear
Katie	6	18
Megan	4	14

The parties decide to trade and the following terms are proposed:

i. 100 apples per 400 pears

ii. 200 pears per 100 apples

iii. 65 pears per 22 apples

iv. 425 pears per 85 apples

19. Given this information, it follows that

    (a) Katie has the comparative advantage in producing both goods.

    (b) Katie has the comparative advantage in producing apples, while Megan has the comparative advantage in pears.

    (c) Katie has the comparative advantage in producing pears, while Megan has the comparative advantage in apples.

    (d) Megan has the comparative advantage in producing both goods.

20. Of the terms of trade proposed, how many would make Megan better off, but would make Katie worse off than without trade?

    (a) 2

    (b) 1

    (c) 3

    (d) 0

    (e) 4

21. Of the terms of trades proposed, how many would make both parties better off than without trade?

    (a) 3

    (b) 2

    (c) 4

    (d) 0

    (e) 1

22. A per-unit tax of $6 is imposed by the government. Use Table 5 to answer the question below.

Table 5: Unit Taxes

	Price with no tax	Price with $6/unit tax on sellers
Price paid by buyers	$55	?
Price paid by sellers	$55	$53.50

Because of this tax, buyers are paying _____per unit and sellers are receiving _____per unit.

    (a) $4.50 more; $1.50 less

    (b) $1.50 more; $4.50 less

    (c) $3 less; $3 more

    (d) $2 more; $4 less

Refer to Table 6, which gives the costs to sell 1 lb of cauliflower for four individuals, for questions 23 - 24.

Table 6: Costs for 1 lb Cauliflower

Seller	Cost
Jasmine	$4.00
Tyler	$2.50
Deepak	$3.00
Sarah	$.50

23. Suppose the price of cauliflower increases from $2.00 to $2.25. The <u>increase</u> in producer surplus in the market as a result of this price change is

    (a) $0

    (b) $0.75

    (c) $0.50

    (d) $0.25

24. There are four buyers in the market for cauliflower. Demand is perfectly elastic and each buyer is willing to pay $3.00 for one pound of cauliflower. Total surplus in the market is thus

    (a) $1.00

    (b) $1.50

    (c) $2.00

    (d) $3.00

25. A binding minimum wage in the market for labor is an example of a _____ and will create a _____.

    (a) price ceiling; shortage of labor

    (b) price floor; shortage of labor

    (c) price ceiling; surplus of labor

    (d) price floor; surplus of labor

26. David and Natalie have won an all-expense paid vacation to Italy (i.e., they would not have to pay any out-of-pocket costs to go on this trip). Natalie has never been out of the country before and loves spaghetti, so she places a value of $10,000 on the trip. On the other hand, David despises Vespas and loud people, so he only places a value of $4,000 on the trip.

The next-best alternative for both individuals is working at the mall, where they could earn $2,000 in wages during the week of the trip. Given this information, which of the following is TRUE?

    (a) The opportunity cost of going on the trip is the same for both.

    (b) The opportunity cost of skipping the trip is the same for both.

    (c) David has a higher opportunity cost of going on the trip.

    (d) Natalie has a lower opportunity cost of skipping the trip.

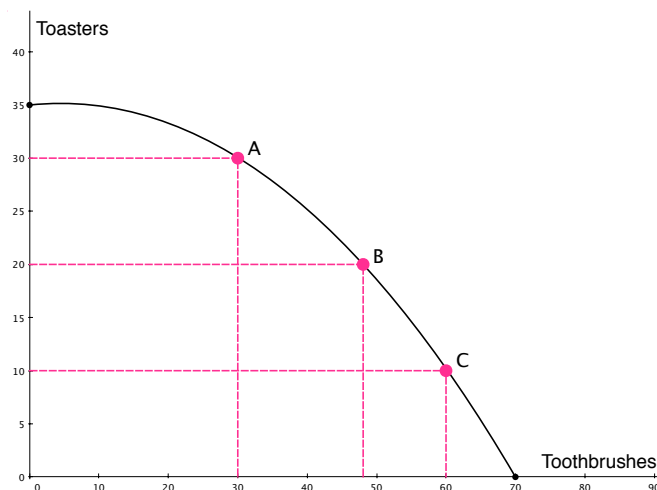   (e) None of the above are true.

27. Refer to Figure 6.

Figure 6: Production Possibilities Frontier

Which of the following statements is TRUE?

    (a) The opportunity cost of toothbrushes is greater at point A than at point C.

    (b) The opportunity cost of toasters is greater at point A than at point C.

    (c) The opportunity cost of toasters is greater at point C than at point A.

    (d) The opportunity cost of toothbrushes and toasters remains the same at all points.

28. A new ad campaign, *Hungry for Apples?*, uses various famous celebrities to promote the benefits and "hipness" of apples. Simultaneously, an influx of migrant workers drives the wage of apple farm laborers down. Given this, we can say that

    (a) the price of apples will decrease, while the change in the quantity bought and sold will be ambiguous.

    (b) the quantity of apples bought and sold will increase, while the change in the price will be ambiguous.

    (c) the price of apples will increase, while the change in the quantity bought and sold will be ambiguous.

    (d) the quantity of apples bought and sold will decrease, while the change in the price will be ambiguous.

    (e) none of the above are true.

29. Paul is a tutor for economics and he is debating whether or not to increase or decrease the price of his services. He has analyzed the market and found that the price elasticity of demand for economics tutors is 0.25 at his current price point. Given this, if Paul wants to increase his total revenue, he should _____his price because _____.

    (a) increase; the price effect will be proportionately larger than the quantity effect

    (b) decrease; the price effect will be proportionately larger than the quantity effect

    (c) increase; the quantity effect will be proportionately larger than the price effect

    (d) decrease; the quantity effect will be proportionately larger than the price effect

30. A subsidy provided in a market with no externalities will create a deadweight loss because

    (a) it will reduce the number of transactions taking place, leading to unrealized gains from trade.

    (b) it will increase the number transactions taking place, leading to inefficient transactions.

    (c) it will decrease both consumer and producer surplus.

    (d) the increase in consumer and producer surplus is greater than the cost of the subsidy.

31. In the market for low-skill labor, the equilibrium wage is $5 an hour. There is currently a minimum wage of $7.25 in place. If the government decides to increase the minimum wage to $8 an hour, there will be a(n) _____in unemployment, which will be largest if _____.

    (a) decrease; labor supply and demand are elastic.

    (b) increase; labor supply and demand are elastic.

    (c) increase; labor supply and demand are inelastic.

    (d) decrease; labor supply and demand are inelastic.

32. The imposition of a binding minimum wage in the market for labor will _____ surplus to workers and _____ total surplus in the market.

   (a) increase; increase

   (b) decrease; increase

   (c) decrease; decrease

   (d) increase; decrease

33. Which of the following statements accurately describes the relationship between the size of a per-unit tax and the size of the associated loss in total surplus?

   (a) As the size of the per-unit tax increases, the deadweight loss incurred decreases regardless of how high the tax is.

   (b) As the size of the per-unit tax increases, the deadweight loss incurred will increase initially, but will decrease after some point.

   (c) As the size of the per-unit tax increases, the deadweight loss incurred increases regardless of how high the tax is.

   (d) As the size of the per-unit tax increases, the deadweight loss incurred will decrease initially, but will increase after some point.

34. John is debating whether or not ride his bike to school today. His mom always yells at him because he spent $800 to buy the bike two months ago, but he never seems to ride it. As a rational individual, John should

   (a) always ride his bike to school in order to "get his money's worth" on the $800 he spent on it.

   (b) only ride his bike to school if the marginal benefit exceeds the $800 cost of the bicycle.

   (c) only ride his bike to school if the marginal benefit exceeds the marginal cost of riding the bicycle.

   (d) never ride his bike to school because his marginal benefit of riding will never exceed $800.

35. Suppose that a tropical storm in Florida destroys various orange growing orchards. As a result, if we were analyzing the market for oranges, we could (in theory)

   (a) calculate the price elasticity of demand, but not the price elasticity of supply.

   (b) calculate the price elasticity of supply, but not the price elasticity of demand.

   (c) calculate the price elasticity of both supply and demand.

   (d) calculate the price elasticity of neither supply or demand.

36. In the market for limes, total surplus is currently $1,500. Which of the following would cause total surplus in the market to increase?

   (a) Either a decrease in demand, supply, or both.

   (b) Either an increase in demand, supply, or both.

   (c) An increase in demand only.

   (d) An increase in supply only.

   (e) None of the above.

37. How many of the following statements are <u>normative</u>?

    i. "An influx of migrants will decrease wages for native workers and lead to less native workers being employed."

    ii. "We should increase the minimum wage because the loss in unemployment is outweighed by the gain in wage payments made to workers."

    iii. "Increasing labor market opportunities for women in developing countries leads to increased labor force participation."

    iv. "If migrant workers are complements to native workers, then an increase in migration will lead to an increase in wages to native workers in both the short and long-run."

    (a) 2

    (b) 4

    (c) 3

    (d) 1

    (e) 0

38. How many of the following statements *could* cause the equilibrium price of drugs to decrease, but cause the equilibrium quantity to increase?

    i. A government program designed to crackdown on drug dealers is put into effect.

    ii. The government expands a drug education program that educates individuals about the dangers of long-term drug use.

    iii. Both the "crackdown" and drug education programs are put into effect simultaneously.

    iv. The government legalizes drug use, leading to a surge of individuals "experimenting" with drug use.

    (a) 1

    (b) 0

    (c) 2

    (d) 4

    (e) 3

39. Which of the following statements is FALSE?

    (a) An individual must have an absolute advantage in producing a good if they can produce more of that good using the same number of inputs as other individuals.

    (b) An individual must have an absolute advantage in producing a good if they can produce the same amount of that good using fewer inputs as other individuals.

    (c) An individual must have an absolute advantage in producing a good if they can produce more of that good using more inputs than other individuals.

    (d) An individual has the comparative advantage in producing a good if their opportunity cost of producing that good is lower than all other individuals.

    (e) All of the above are true.

40. Suppose Kenya and Sri Lanka have the opportunity costs of producing limes and oranges outlined in Table 7.

Table 7: Opportunity cost of one:

	Lime	Orange
Kenya	1/12	x
Sri Lanka	y	8

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Given this information, we can say that

(a) Kenya has the comparative advantage in producing limes and Sri Lanka has the comparative advantage in producing oranges.

(b) Kenya has the comparative advantage in producing oranges and Sri Lanka has the comparative advantage in producing limes.

(c) Kenya has the absolute advantage in producing oranges and Sri Lanka has the absolute advantage in producing limes.

(d) Kenya has the absolute advantage in producing limes and Sri Lanka has the absolute advantage in producing oranges.

(e) there is not enough information to answer this question.