

## Question #1 of 185

Question ID: 413500

Which of the following is *least likely* to be an obstacle to the efficient allocation of resources?

- ☐ A) Price controls.
- ☒ B) Technological advancement.
- ☐ C) Common resources.

### Explanation

As opposed to being an obstacle to allocative efficiency, technological advancement requires a constant reallocation of an economy's resources to more efficient uses.

## Question #2 of 185

Question ID: 413495

Which of the following statements is *most* accurate with respect to the effects of taxes imposed on goods and services?

- ☐ A) The statutory incidence will fall more heavily on the buyer if the supply is less elastic relative to demand.
- ☒ B) The actual incidence will fall more heavily on the seller if the supply is less elastic relative to demand.
- ☐ C) The actual incidence will fall more heavily on the buyer if the demand is more elastic relative to supply.

### Explanation

When supply is relatively inelastic, changes in quantity are small for a given change in price, and a larger share of the tax burden-the tax incidence-will fall on the sellers.

## Question #3 of 185

Question ID: 413592

Which of the following two factors are *most likely* to be considered variable during the short run?

- ☐ A) Labor and technology.
- ☒ B) Labor and raw materials.
- ☐ C) Raw materials and technology.

### Explanation

Of the sets of factors listed, the two that are typically considered variable in the short run are labor and raw materials.

## Question #4 of 185

Question ID: 413558

Under which pair of conditions is a factor of production *least likely* to earn economic rent?

Supply curve

Demand curve

- ☒ A) Perfectly inelastic      Perfectly elastic
- ☒ B) Upward sloping      Downward sloping
- ☒ C) Perfectly elastic      Downward sloping

### Explanation

If the supply of a productive resource is perfectly elastic, it earns no economic rent. Elasticity of demand is not directly related to economic rent.

## Question #5 of 185

Question ID: 413460

A columnist is discussing how the efficient quantity of output for a good or service is determined. These two statements appear in his column:

- Statement 1: The equilibrium quantity of production for a good or service can be considered efficient as long as the marginal social benefit of that quantity is greater than its marginal social cost.
- Statement 2: Subsidies and quotas typically result in production of a good or service in quantities at which the marginal social cost exceeds the marginal social benefit.

With respect to these statements:

- ☒ A) both are correct.
- ☒ B) only one is correct.
- ☒ C) both are incorrect.

### Explanation

Statement 1 is incorrect. The efficient quantity of output is the quantity at which the marginal social benefit (demand) is equal to the marginal social cost (supply). Statement 2 is also incorrect. Subsidies typically lead to overproduction, where the marginal social cost at the quantity produced is greater than the marginal social benefit. Quotas, however, typically limit production to a level below equilibrium, such that the marginal social benefit at the quantity produced is greater than the marginal social cost.

## Question #6 of 185

Question ID: 413509

Which of the following statements about price floors and the labor market is *least* accurate?

- ☒ A) Setting a minimum wage above the equilibrium wage rate will lead to an excess supply of labor.

- ☐ **B)** In the long run, effective price floors lead to inefficiencies in production.
- ☒ **C)** If a price floor is set below the equilibrium price, the quantity demanded will exceed the quantity supplied.

#### Explanation

If a price floor is set below the equilibrium price, it will have no effect on the quantity demanded or supplied. However, a price floor (minimum wage in the labor market) above the equilibrium price (wage rate in the labor market) will cause a surplus at the floor price. Inefficiencies result from a price floor because producers will divert resources to supply a larger quantity of the good, but consumers will demand a smaller quantity at the floor price.

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### Question #7 of 185

Question ID: 413576

A firm realizes that it is producing more than the profit maximizing level of output and makes a short-run decision to decrease its output. Which of the firm's cost measures is *least likely* to decrease as a result?

- ☐ **A) Average variable cost.**
- ☐ **B) Marginal cost.**
- ☒ **C) Average fixed cost.**

#### Explanation

A short-run decrease in output will cause a firm's average fixed costs to increase because its fixed costs are spread over a smaller number of units. In terms of cost curves, average fixed cost never slopes upward, so a decrease in output never reduces average fixed costs. The average variable cost, average total cost, and marginal cost curves all have upward sloping components along which a lower level of output would result in a lower cost.

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### Question #8 of 185

Question ID: 413602

Which of the following *most* accurately describes the typical relationship between marginal product (MP) and average product (AP)? As the quantity of labor increases:

- ☐ **A) initially,  $AP > MP$ , then  $AP = MP$ , then  $AP < MP$ .**
- ☐ **B) initially,  $AP = MP$ , then  $AP > MP$ .**
- ☒ **C) initially,  $AP < MP$ , then  $AP = MP$ , then  $AP > MP$ .**

#### Explanation

MP intersects the AP maximum from above. MP is initially greater than average product, and then MP and AP intersect. Beyond this intersection, MP is less than AP. (Hint: sketch the curves.)

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### Question #9 of 185

Question ID: 413617

The law of diminishing returns states that for a given production process, as more and more of a resource (such as labor) are added, holding the quantities of other resources fixed:

- ✓ **A) output increases at a decreasing rate.**
- ✗ **B) cost declines at a decreasing rate.**
- ✗ **C) cost declines at an increasing rate.**

#### Explanation

The law of diminishing returns states that for a given production process, as more and more resources (such as labor) are added holding the quantities of other resources fixed, output increases at a decreasing rate. This occurs because, at some point, adding more workers results in inefficiencies.

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### Question #10 of 185

Question ID: 413538

In the context of consumer choice, the concept of utility measures:

- ✗ **A) how often consumers utilize specific combination of goods.**
- ✗ **B) the types of goods and services that consumers desire most frequently.**
- ✓ **C) the satisfaction consumers receive from consuming a specific combination of goods.**

#### Explanation

Utility theory explains consumers' behavior based on their preferences for various combinations of goods, in terms of the satisfaction each combination provides.

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### Question #11 of 185

Question ID: 413474

The "winner's curse" is associated with what type of auction?

- ✗ **A) Ascending price auction.**
- ✓ **B) Common value auction.**
- ✗ **C) Private value auction.**

#### Explanation

In a common value auction, the asset being auctioned will provide the same value to any bidder, but that value is unknown to the bidders (for example, an auction of the mineral rights on a given tract of land). The "winner's curse" refers to the fact that a bidder who most overestimates the value of the asset will win the auction. By contrast, in a private value auction, the asset being auctioned has a different value to each bidder (for example, an auction of an antique automobile), and each bidder will bid only as much as the asset is worth to him. An ascending price or English auction is a technique that can be used in a common value auction or a private value auction.

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### Question #12 of 185

Question ID: 413574

Which of the following statements regarding marginal costs (MC) and average variable costs (AVC) is *most* accurate?

- ✗ **A) MC = AVC when average total cost is at its minimum.**

- ✓ **B) MC = AVC** when AVC is at its minimum.
- ✗ **C) MC = Average total cost** when AVC is at its minimum.

Explanation

MC = AVC at minimum average variable cost. MC = ATC at minimum average total cost.

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**Question #13 of 185**

Question ID: 413567

Factors of production for a firm *least likely* include:

- ✗ **A) land.**
- ✓ **B) technology.**
- ✗ **C) capital.**

Explanation

Factors of production include land, labor, capital, and materials. Technology is typically viewed as an exogenous factor that affects the productivity of factors of production.

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**Question #14 of 185**

Question ID: 413590

Which of the following factors of production is *least likely* to be fixed in the short run?

- ✗ **A) Plant size.**
- ✓ **B) Labor.**
- ✗ **C) Technology.**

Explanation

Labor is typically assumed to be variable in the short run.

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**Question #15 of 185**

Question ID: 413620

Which of the following conditions is *most likely* to exist for a typical production process when average product is at its maximum?

- ✓ **A) Average variable cost is at a minimum.**
- ✗ **B) Marginal product is increasing.**
- ✗ **C) Marginal cost is at a minimum.**

Explanation

When average product is at a maximum, average variable cost is at a minimum. At the corresponding labor and output level, marginal product is decreasing and marginal cost is increasing.

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### Question #16 of 185

Question ID: 413467

If quantity supplied =  $-28 + 7 \times \text{price}$ , the slope of the supply curve is:

- ☐ A) 4.
- ☐ B) -7.
- ☒ C)  $1/7$ .

#### Explanation

The supply curve for the good is determined by inverting the given supply function, which results in:  $\text{price} = 1/7 \times \text{quantity supplied} + 4$ . The slope of this curve is  $1/7$ .

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### Question #17 of 185

Question ID: 413503

A price ceiling is only effective if it:

- ☒ A) is set below the equilibrium price.
- ☐ B) is set above the equilibrium price.
- ☐ C) has been in effect in over a relatively short time.

#### Explanation

A price ceiling is only effective if it is lower than the equilibrium price without the ceiling. This leads to a shortage as consumers wish to purchase a quantity of the good at the ceiling price which is greater than the quantity supplied at that price.

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### Question #18 of 185

Question ID: 413596

Compared to the short-run supply curve, the long-run supply curve is:

- ☒ A) flatter.
- ☐ B) more inelastic.
- ☐ C) steeper sloping upward to the right.

#### Explanation

The long-run supply curve is more elastic and flatter than the short-run supply curve. In the long run, firms in an industry can adjust their production methods and scale.

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### Question #19 of 185

Question ID: 413493

When a tax is imposed on the consumption of a good, which of the following terms refers to who bears the burden of the tax?

- ☐ A) Consumer surplus.
- ☒ B) The incidence of a tax.

☐ C) The deadweight loss.

#### Explanation

The incidence of a tax refers to how the burden of a tax is actually shared between buyers and sellers. The deadweight loss is the loss of the gains from trade from the lower equilibrium quantity that results from the tax. Consumer surplus is the gains from trade that consumers accrue from the existence of the market.

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### Question #20 of 185

Question ID: 413541

Which of the following statements about indifference curves is *most* accurate?

- ☐ A) A consumer's optimal bundle of goods is the bundle at which the indifference curves intersect.
- ☒ B) All bundles of goods on an indifference curve provide equal utility to a consumer.
- ☐ C) On any indifference curve, the bundle nearest the origin is the consumer's least preferred bundle.

#### Explanation

An indifference curve represents all the bundles of two goods that provide equal utility to a particular consumer. Any bundle on a higher indifference curve is preferred to any bundle on a lower indifference curve. Indifference curves cannot cross if the consumer's preferences are transitive (i.e., logically consistent).

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### Question #21 of 185

Question ID: 413475

An asset is being sold using a Vickrey auction. Four bidders submit the bids of \$48,000, \$51,000, \$52,000, and \$49,000. The winning bidder will pay a price of:

- ☒ A) \$51,000.
- ☐ B) \$52,000.
- ☐ C) \$50,000.

#### Explanation

A Vickrey auction is also known as a second-price sealed bid auction. The highest bidder wins the item being auctioned, but pays the price bid by the second-highest bidder.

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### Question #22 of 185

Question ID: 413517

If the price elasticity of demand is  $-2$  and the price of the product decreases by 5%, the quantity demanded will:

- ☐ A) increase 5%.
- ☐ B) decrease 2%.
- ☒ C) increase 10%.

### Explanation

If the price elasticity of demand is  $-2$ , and the price of the product decreases by 5%, the quantity demanded will increase 10%. The value,  $-2$ , indicates that the percentage increase in the quantity demanded will be twice the percentage decrease in price.

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### Question #23 of 185

Question ID: 413608

The increase in total revenue from selling the additional output of one more unit of an input is called the input's:

- ☐ A) marginal revenue.
- ☒ B) marginal revenue product.
- ☐ C) factor of production.

### Explanation

The marginal revenue product of an input is the addition to total revenue gained by selling the additional output from employing one more unit of that input.

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### Question #24 of 185

Question ID: 413529

If the price elasticity of demand for a good is 4.0, then a 10% increase in price would result in a:

- ☐ A) 4% decrease in the quantity demanded.
- ☐ B) 10% decrease in the quantity demanded.
- ☒ C) 40% decrease in the quantity demanded.

### Explanation

Price elasticity of demand = ( $\%$  change in Q demanded /  $\%$  change in price). Given the price elasticity of demand and the percentage change in price, we can solve for the percentage change in Q demanded.

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### Question #25 of 185

Question ID: 413506

Which of the following is *least likely* to be the result of a minimum wage?

- ☒ A) Labor will be substituted for capital.
- ☐ B) There will be an abundance of low-skilled workers willing to work.
- ☐ C) On-the-job training will be cut back.

### Explanation

Firms substitute capital for the "expensive" labor and use more than the economically efficient amount of capital.

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### Question #26 of 185

Question ID: 413487



The imposition of a tax on producers but not on buyers in a market currently in equilibrium is *most likely* to increase:

- ☐ A) actual tax incidence on producers but not on buyers.
- ☐ B) quantity supplied and price paid by buyers.
- ☒ C) price paid by buyers and reduce quantity demanded.

#### Explanation

The imposition of a tax on producers is likely to result in an upward shift in the supply curve, a reduction in the equilibrium quantity supplied and demanded, an increase in equilibrium price, and an increase in taxes paid by both suppliers and buyers. Actual tax incidence refers to taxes paid and not statutory taxes, thus actual tax incidence is likely to rise on both producers and buyers as market prices rise.

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### Question #27 of 185

Question ID: 413566

Marginal revenue is equal to price for firms operating in which market structure(s)?

- ☐ A) Both perfect competition and imperfect competition.
- ☐ B) Neither perfect competition nor imperfect competition.
- ☒ C) Perfect competition only.

#### Explanation

In perfectly competitive markets, firms can sell the entire quantity they produce at the market price, so marginal revenue is equal to the market price. In imperfect competition, firms are price searchers in that they can increase their quantity sold only by decreasing the selling price per unit. As a result, marginal revenue is less than price.

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### Question #28 of 185

Question ID: 413573

Which of the following *most* accurately describes the shapes of the average variable cost (AVC) and average total cost (ATC) curves?

- ☒ A) The AVC and ATC curves are both U-shaped.
- ☐ B) The AVC and ATC curves both decrease initially, and then flatten.
- ☐ C) The AVC curve is U-shaped whereas the ATC curve declines initially then flattens.

#### Explanation

The AVC curve is U-shaped, declining at first due to efficiency, but eventually increasing due to diminishing returns. The AFC curve decreases as output increases, and eventually flattens out. The ATC is U-shape because it is the sum of the decreasing-to-flat AFC curve plus the U-shaped AVC curve.  $ATC = AFC + AVC$ .

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### Question #29 of 185

Question ID: 413572

Which of the following *most* accurately describes the shape of the average fixed cost (AFC) curve? The AFC curve:

- ☐ A) intersects the marginal cost curve at the marginal cost curve's minimum.
- ☐ B) is always below the average variable cost curve.
- ☒ C) becomes flatter as output increases.

#### Explanation

The AFC curve declines initially, but as output increases it flattens because a fixed cost is being averaged over more and more units of output.

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### Question #30 of 185

Question ID: 413507

A minimum wage set above the equilibrium minimum wage will *most likely* have which of the following effects?

- ☐ A) There will be a shortage of workers.
- ☒ B) Unemployment will rise.
- ☐ C) It will have no effects.

#### Explanation

Firms will not employ all the workers who want to work at the imposed higher wage. Those who want to work at the higher wage but cannot find jobs will be counted as unemployed.

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### Question #31 of 185

Question ID: 413481

In an unregulated competitive market, which of the following conditions *most accurately* describes the condition that exists when the efficient quantity of a good or service is produced and consumed?

- ☒ A) The sum of consumer surplus and producer surplus is maximized.
- ☐ B) Consumer surplus equals producer surplus.
- ☐ C) Producer surplus is maximized.

#### Explanation

When the efficient quantity is produced, the sum of the consumer surplus and producer surplus is maximized.

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### Question #32 of 185

Question ID: 413546

If a consumer's budget for pens and pencils remains stable, but the price of both pens and pencils doubles, the slope of the budget line is *most likely* to:

- ☐ A) decrease by half.
- ☒ B) remain unchanged.
- ☐ C) double.

#### Explanation

The slope of the budget line reflects the relative price of two goods. If the price of both pens and pencils doubles, the relative price is unchanged and thus the slope of the budget line will also be unchanged.

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### Question #33 of 185

Question ID: 413502

Which of the following *most* accurately describes society's allocation of resources to the production of goods with external costs or external benefits, respectively?

- ✓ **A) Over-allocation; under allocation.**
- ✗ B) Over-allocation; over-allocation.
- ✗ C) Under-allocation; over-allocation.

#### Explanation

External costs are costs associated with the production of goods which are not entirely borne by producers. The industrial pollution of fishing waters decreases the yield to the fishing industry. However, the lost revenue to the fishing industry is not considered a cost to the firms generating the pollution. The result is an over-allocation of resources to the production of goods made by the firms generating the pollution.

External benefits refer to benefits received by those other than the buyers of a good. Scenic gardens and fountains built by private enterprises for their own interests are examples of goods with external benefits. Since the marginal benefit to society is greater than that of the marginal cost to the producer, less than the efficient quantity is produced.

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### Question #34 of 185

Question ID: 413501

Which of the following relationships *most* accurately describes the inefficiency resulting from government imposed production quotas?

- ✗ **A) Marginal cost exceeds marginal benefit leading to underproduction.**
- ✓ B) Marginal benefit exceeds marginal cost leading to underproduction.
- ✗ C) Marginal benefit exceeds marginal cost leading to overproduction.

#### Explanation

Government imposed quotas restrict production to a level below that which would occur if marginal benefit equals marginal cost. This restricted output quantity is less than the equilibrium quantity, so marginal benefit exceeds marginal cost.

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### Question #35 of 185

Question ID: 413556

A distinction between Giffen goods and Veblen goods is that:

- ✗ **A) the substitution effect is positive for a Veblen good but negative for a Giffen good.**
- ✗ B) demand curves for Giffen goods slope upward, while demand curves for Veblen goods slope downward.

- ✓ **C)** Giffen goods are inferior goods, while Veblen goods are not inferior goods.

#### Explanation

Giffen goods are inferior goods for which the quantity demanded decreases when the price decreases, because the negative income effect is larger than the positive substitution effect. Veblen goods are goods for which the quantity demand increases when the price increases, such as a high-status good for which the consumer gains utility from being seen to consume the good. Giffen goods and Veblen goods, if they exist, have demand curves that slope upward over at least some range of prices. The substitution effect is positive for all goods.

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### Question #36 of 185

Question ID: 413459

The supply function for a good is: quantity supplied =  $-750 + 15 \times \text{price}$ . If this good has 10 suppliers, the supply curve for the good is:

- ✓ **A) price =  $1/150 \times \text{quantity supplied} + 50$ .**
- ✗ **B) quantity supplied =  $-7,500 + 150 \times \text{price}$ .**
- ✗ **C) price =  $1/15 \times \text{quantity supplied} + 5$ .**

#### Explanation

The supply *function* for the market is: quantity supplied =  $-7,500 + 150 \times \text{price}$ . To get the supply *curve*, we must invert the supply function (i.e., state it in terms of price). Solving for price, we get: price =  $1/150 \times \text{quantity supplied} + 7,500/150$ , or price =  $50 + 1/150 \times \text{quantity supplied}$ .

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### Question #37 of 185

Question ID: 413512

The effect of a price ceiling set above the equilibrium price is *most* accurately described by which of the following statements?

- ✗ **A) Quantity demanded will exceed quantity supplied.**
- ✓ **B) It will have no effect on equilibrium price and quantity.**
- ✗ **C) Quantity supplied will exceed quantity demanded.**

#### Explanation

If a price ceiling is above the equilibrium price, it will have no effect on price or quantity.

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### Question #38 of 185

Question ID: 413554

A decrease in the price of Good Y can result in a decrease of the quantity of Good Y demanded by consumers if the substitution effect:

- ✗ **A) and the income effect are negative.**
- ✗ **B) is negative and larger than the positive income effect.**
- ✓ **C) is positive and the income effect is negative and larger than the substitution effect.**

### Explanation

If the price of Good Y decreases, the substitution effect will have a positive impact on the quantity demanded of Good Y. Thus, the only way that quantity demanded of Good Y can decrease is if there is a negative income effect that is greater in magnitude than the substitution effect; i.e., if Good Y is a Giffen good.

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### Question #39 of 185

Question ID: 413486

The supply function for a good is: Quantity =  $-180 + 3 \times \text{Price}$ . At an equilibrium price of 150, producer surplus is *closest* to:

☒ A) 24,300.

☐ B) 18,225.

☒ C) 12,150.

### Explanation

Producer surplus is the area of the triangle (one-half  $\times$  base  $\times$  height) formed by the supply function, the equilibrium price, and the vertical axis.

The supply function intersects the vertical axis at the price at which quantity supplied equals zero:  $0 = -180 + 3P$ ,  $P = 60$ . Thus the height of the triangle is  $150 - 60 = 90$ .

The quantity supplied at the equilibrium price of 150 is:  $-180 + 3(150) = 270$ . This is the base of the triangle.

The area of the triangle is  $\frac{1}{2} \times 90 \times 270 = 12,150$ , which is producer surplus.

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### Question #40 of 185

Question ID: 413618

A firm uses labor inputs with a cost of \$45 per unit of labor and a marginal product of 15 units of output. The firm uses capital inputs with a cost of \$60 per unit of capital and a marginal product of 20 units of output. Is this firm minimizing its cost per unit of output?

☒ A) Yes.

☐ B) No, the firm should use more capital and less labor.

☐ C) No, the firm should use more labor and less capital.

### Explanation

If a firm is using the combination of inputs that minimizes costs, the ratios of each input's marginal product to its cost are equal. For this firm, additional output from employing one more unit of labor costs  $\$45 / 15 = \$3$  per unit, while additional output from employing one more unit of capital costs  $\$60 / 20 = \$3$  per unit. Because these costs per unit of each input are equal, the firm is using the combination of inputs that minimizes costs per unit of output.

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### Question #41 of 185

Question ID: 413518

Income elasticity is defined as the percentage change in:

- ✓ **A) quantity demanded divided by the percentage change in income.**
- ✗ **B) income divided by the percentage change in the quantity demanded.**
- ✗ **C) quantity demanded divided by the percentage change in the price of the product.**

Explanation

Income elasticity is defined as the percentage change in quantity demanded divided by the percentage change in income. Normal goods have positive values for income elasticity, and inferior goods have negative income elasticity.

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**Question #42 of 185**

Question ID: 413461

Partial equilibrium analysis is *least likely* to include the effect of:

- ✓ **A) price of a good on demand for a complement.**
- ✗ **B) consumer income on demand.**
- ✗ **C) consumer tastes on demand.**

Explanation

Partial equilibrium analysis does not consider the effect of changes in the equilibrium price of a good on the markets for other goods. For example, under partial equilibrium analysis, the effect of a change in the price of a good on the demand for a complement, and the resulting change in the equilibrium price of the complement, are not considered. The demand function for a good assumes the price of a complement is fixed. A general equilibrium analysis would include this secondary effect of a change in the price of a good on the equilibrium price of a complement. Consumer income and preferences are included in the demand function for a good under partial equilibrium analysis.

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**Question #43 of 185**

Question ID: 413525

If a good has elastic demand, a small price decrease will cause:

- ✗ **A) no change in the quantity demanded.**
- ✓ **B) a larger increase in quantity demanded.**
- ✗ **C) a larger decrease in the quantity demanded.**

Explanation

If a good has elastic demand, a small price decrease will cause a larger increase in the quantity demanded.

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**Question #44 of 185**

Question ID: 413571

If marginal cost is above the average cost, when you produce your next unit:

- ✓ **A) average cost will increase.**
- ✗ **B) average cost will decline.**
- ✗ **C) average cost will be flat.**

### Explanation

If marginal cost is above the average cost, when you produce your next unit, average cost will increase. Because marginal cost is the cost of producing the next unit, and because this cost is above the firm's average cost per unit, the average cost per unit must increase, if only slightly. Based on the information provided in the question, there is no way to know what will happen to the marginal cost of future units produced.

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### Question #45 of 185

Question ID: 413565

The demand curve for a firm's output is represented by the following table:

Quantity	1	2	3	4	5
Price per unit	12	11	10	9	8

The market structure under which this firm operates is *least likely*:

- ☒ A) perfect competition.
- ☐ B) oligopoly.
- ☐ C) monopolistic competition.

### Explanation

The firm faces a downward-sloping demand curve and is therefore a price searcher. A firm operating under perfect competition is a price taker.

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### Question #46 of 185

Question ID: 413447

In a demand function for Good M, if the price of a substitute for Good M decreases, the quantity demanded of Good M:

- ☐ A) increases.
- ☒ B) decreases.
- ☐ C) may increase or decrease.

### Explanation

The price coefficient of a substitute in a demand function is positive. This means a decrease in the price of a substitute for a good will decrease the quantity demanded of that good.

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### Question #47 of 185

Question ID: 413505

The long-term effects of a price ceiling on a market are *least likely* to include:

- ☒ A) an improvement in quality to offset the reduction in quantity.
- ☐ B) discrimination by sellers.
- ☐ C) an increase in waiting times to purchase.

### Explanation

A price ceiling is a price above which producers cannot sell, and is generally set below the market equilibrium. Producers often respond by reducing the quality of goods commensurate with their lower imposed price.

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### Question #48 of 185

Question ID: 413550

With respect to utility theory, the substitution effect for a decrease in the price of a good:

- ☒ A) will increase consumption of the good.
- ☐ B) will decrease consumption of the good.
- ☐ C) may increase or decrease consumption of the good.

### Explanation

In utility theory, if the price of one good decreases, the substitution effect causes consumption of that good to increase.

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### Question #49 of 185

Question ID: 413521

The primary factors that influence the price elasticity of demand for a product are:

- ☐ A) changes in consumers' incomes, the time since the price change occurred, and the availability of substitute goods.
- ☐ B) the proportions of consumers' budgets spent on the product, the size of the shift in the demand curve for a product, and changes in consumers' price expectations.
- ☒ C) the availability of substitute goods, the time that has elapsed since the price of the good changed, and the proportions of consumers' budgets spent on the product.

### Explanation

The three primary factors influencing the price elasticity of demand for a good are the availability of substitute goods, the proportions of consumers' budgets spent on the good, and the time since the price change. If there are good substitutes, when the price of the good goes up, some customers will switch to substitute goods. For goods that represent a relatively small proportion of consumers' budgets, a change in price will have little effect on the quantity demanded. For most goods, the price elasticity of demand is greater in the long run than in the short run.

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### Question #50 of 185

Question ID: 413530

If the price elasticity of demand is 1.5 and a change in the price of the product increases the quantity demanded by 4%, then what is the percent change in price?

- ☐ A) -0.375%.
- ☒ B) -2.667%.
- ☐ C) +2.667%.



### Explanation

Price elasticity of demand is calculated by dividing the percent change in quantity demanded by the percent change in price. The percent change in price is, therefore, the percent change in quantity demanded divided by the price elasticity of demand =  $4 / 1.5 = 2.667$ .

Because of the inverse relationship between quantity demanded and price, the price elasticity is always going to be negative although economists usually ignore the negative sign and just use the absolute value. To properly predict the price change a negative sign needs to be added to the price elasticity before the calculation or to the answer after the calculation.

Using the latter case, the 2.667% will become -2.667%, showing that an increase in quantity demanded of 4% will cause a decrease in the price of 2.667% when the price elasticity is 1.5 (-1.5).

---

## Question #51 of 185

Question ID: 413484

Consumer surplus is *most* accurately defined as the difference between the:

- ☐ A) value consumers are willing to pay for an additional unit of good or service and the cost of producing the additional unit of the good or service.
- ☐ B) price that a consumer must pay for an additional unit of a good or service and the cost of producing the additional unit of the good or service.
- ☒ C) total value consumers place on the quantity of a good purchased, and the total amount they must pay for that quantity.

### Explanation

For an individual, consumer surplus is defined as the sum of the differences between what that individual is willing to pay for each individual unit of a good or service that he or she purchases and the amount that he or she actually pays for each of these individual units.

---

## Question #52 of 185

Question ID: 413612

Which of the following statements regarding diminishing marginal returns is *most* accurate?

- ☐ A) As the quantity produced rises, costs begin to rise at a decreasing rate.
- ☒ B) As the quantity produced rises, costs begin to rise at an increasing rate.
- ☐ C) The total cost curve arches downward.

### Explanation

At production levels that are consistent with decreasing marginal returns, costs will increase at an increasing rate as production rises.

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## Question #53 of 185

Question ID: 413579

In the short run, if price is below average total cost (ATC) the firm will:

- ☐ A) produce more.
- ☒ B) keep running as long as it is covering its variable costs.
- ☐ C) raise prices.

#### Explanation

In the short run, if the firm is covering its average variable costs and some of its fixed costs it will continue to operate as long as the situation is temporary.

---

### Question #54 of 185

Question ID: 413498

Which of the following statements regarding deadweight loss is *least* accurate?

- ☐ A) Deadweight loss occurs when the quantity supplied does not maximize the sum of consumer and producer surplus.
- ☒ B) Deadweight loss from underproduction leads to a loss of producer surplus but not consumer surplus.
- ☐ C) An overproduction of goods can lead to a reduction in consumer surplus.

#### Explanation

Deadweight loss is the reduction in consumer and producer surplus due to underproduction or overproduction.

---

### Question #55 of 185

Question ID: 413595

The fact that firms can make more adjustments to production methods in the long run gives the firm:

- ☐ A) the ability to quickly adjust output.
- ☐ B) a long-run supply curve that is steeper than its short-run supply curve.
- ☒ C) a long-run supply curve that is more elastic than its short-run supply curve.

#### Explanation

Firms can adjust the fixed nature of their production costs in the long run through the purchase or sale of fixed assets. Therefore, it costs less to adjust output slowly in response to a change in demand. In the long run, there will be a greater change in the quantity supplied for a given change in price. This is because in the long run firms can change their production capacity.

---

### Question #56 of 185

Question ID: 413527

If the price of World Cup Soccer tickets increases from \$40 a ticket to \$50 a ticket and the quantity demanded of tickets stays the same, demand for the tickets is:

- ☐ A) inelastic, but not perfectly inelastic.

- ☐ B) elastic, but not perfectly elastic.
- ☒ C) perfectly inelastic.

#### Explanation

Since the quantity of tickets demanded stayed the same after the price changed, the demand curve would have to be vertical which is a perfectly inelastic demand curve.

---

### Question #57 of 185

Question ID: 413463

An unstable market equilibrium results when:

- ☒ A) prices above or below equilibrium drive the price away from equilibrium.
- ☐ B) the supply curve is less steeply sloped than the demand curve.
- ☐ C) a price above equilibrium results in excess supply.

#### Explanation

An equilibrium is unstable if a price above equilibrium results in excess demand or a price below equilibrium results in excess supply, because in these situations competitive forces would drive the price away from its equilibrium level instead of toward it. This would be the case if the supply curve for a good was both downward sloping and less steeply sloped than the demand curve. A normal, upward-sloping supply curve of any steepness results in a stable equilibrium at the price and quantity where it intersects the demand curve.

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### Question #58 of 185

Question ID: 413582

A firm operating under imperfect competition will maximize profits by producing additional units until:

- ☐ A) total revenue is at its maximum.
- ☐ B) marginal revenue exceeds marginal costs.
- ☒ C) marginal revenue equals marginal costs.

#### Explanation

Under perfect competition or imperfect competition, a firm will maximize profits at the output quantity at which marginal revenue equals marginal cost.

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### Question #59 of 185

Question ID: 413577

A firm in a perfectly competitive industry that seeks to maximize profit is *most likely* to continue production in the short run as long as which of the following conditions exists? Price is equal to or greater than:

- ☐ A) marginal cost.
- ☒ B) average variable costs.
- ☐ C) average fixed cost.

### Explanation

If a firm is covering its average variable costs, it will continue to operate in the short run since it is covering some portion of its fixed costs.

## Question #60 of 185

Question ID: 413619

Which of the following *most* accurately describes the relationship between marginal cost (MC), average variable cost (AVC), marginal product (MP), and average product (AP)?

- ☒ A) When  $MP > AP$ ,  $MC > AVC$ .
- ☒ B) When  $MP = AP$ ,  $MC > AVC$ .
- ☒ C) When  $MP = AP$ ,  $MC = AVC$ .

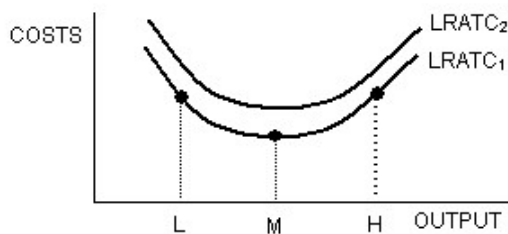
### Explanation

At some output level  $Q$  and corresponding labor input  $L$ ,  $MC = AVC$  and  $MP = AP$ . At  $Q$  and  $L$ ,  $AVC$  is at its minimum and  $AP$  is at its maximum. Hint: draw the curves.

## Question #61 of 185

Question ID: 434234

The graph of two long run average total cost (LRATC) curves for a typical company appears below.



Based on this graph, which of the following statements is *least* accurate?

- ☒ A) At point L, the company is experiencing economies of scale.
- ☒ B) The ideal plant size is indicated by point M.
- ☒ C) The use of improved technology may have caused the company to move from  $LRATC_1$  to  $LRATC_2$ .

### Explanation

The use of improved technology would likely result in decreased costs and a *downward* shift in the LRATC. An upward shift in the LRATC curve may result from increased taxes, increased resource prices, or new government regulations, as these actions likely increase costs.

The other statements are true. *Note:* At point H, the firm is experiencing diseconomies of scale.

## Question #62 of 185

Question ID: 485762

If there are only two goods and each of their prices double, the slope of a consumer's budget line is *most likely* to:

- ☐ A) decrease by half.
- ☒ B) remain unchanged.
- ☐ C) double.

Explanation

The slope of the budget line reflects the relative price of the two goods. If the price of both goods doubles, their relative price is unchanged and thus the slope of the budget line will also be unchanged.

---

**Question #63 of 185**

Question ID: 413542

For a consumer with a given level of income, a budget constraint is *best* described as:

- ☐ A) all affordable combinations of two goods the consumer could purchase.
- ☐ B) the largest combinations of two goods that would provide equal utility to the consumer.
- ☒ C) the combinations of two goods that exhaust a consumer's income.

Explanation

A budget constraint or budget line represents the combinations of two goods that exhaust a consumer's income. Combinations on a budget line are not assumed to provide the same utility to the consumer. The set of all affordable combinations of two goods is best described as an opportunity set.

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**Question #64 of 185**

Question ID: 413593

Which of the following statements about the short-run and long-run decision time frames is *most* accurate?

- ☐ A) In the short run, technology of production is variable.
- ☒ B) In the long run, a firm can adjust its input quantities, production methods, and plant size.
- ☐ C) In the long run, quantities of some resources are fixed.

Explanation

In the *short* run, quantities of some resources, including technology of production, are fixed. Typically, economists treat labor and raw materials as variable, holding plant size, the amount of capital equipment, and technology constant. In the *long* run, all factors of production are assumed to be variable.

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**Question #65 of 185**

Question ID: 413562

Which of the following *most completely* describes opportunity costs?

- ☒ A) Opportunity costs include implicit and explicit costs.
- ☐ B) Opportunity costs include only explicit costs.

☒ C) Opportunity costs include only implicit costs.

Explanation

Opportunity costs include implicit and explicit costs. Normal profit is the opportunity cost of owners' time, resources, and expertise.

---

**Question #66 of 185**

Question ID: 413513

Which of the following is *least likely* to be the long-run effect of a price ceiling that is set below the equilibrium price?

- ☒ A) Sellers take bribes.
- ☒ B) Sellers improve quality.
- ☒ C) Consumers have to wait to make purchases.

Explanation

Under price ceilings, sellers may reduce the quality of goods to a level that reflects the imposed ceiling price.

---

**Question #67 of 185**

Question ID: 413445

The market for labor is *best* described as a:

- ☒ A) services market.
- ☒ B) factor market.
- ☒ C) goods market.

Explanation

While some part of the labor market is dedicated to providing services, labor is generally viewed as a factor of production.

---

**Question #68 of 185**

Question ID: 413462

An equilibrium is unstable if the supply curve slopes downward and:

- ☒ A) is less steeply sloped than the demand curve.
- ☒ B) is parallel to the demand curve.
- ☒ C) is more steeply sloped than the demand curve.

Explanation

If a supply curve slopes downward and is less steeply sloped than the demand curve, prices above or below equilibrium will tend to get further from equilibrium, which means the equilibrium is unstable. A downward sloping supply curve more steeply sloped than the demand curve would result in a stable equilibrium. A downward sloping supply curve parallel to the demand curve would not result in any equilibrium quantity or price.

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### Question #69 of 185

Question ID: 413473

The following table lists bids for Treasury securities. A total of \$11 billion in securities are to be auctioned using a single-price auction. In addition, there are \$2 billion in non-competitive bids.

<u>Bidder</u>	<u>Discount Rate</u>	<u>Face Value (\$ billions)</u>
V	4.93%	5
W	4.88%	4
X	4.73%	2
Y	4.49%	3
Z	4.35%	6

Which competitive bidders will win the securities?

- ☒ **A) Bidders Y and Z.**
- ☐ **B) Bidders V, W, and X.**
- ☐ **C) Bidders V and W.**

#### Explanation

With \$2 billion in non-competitive bids (will accept the auction price), only \$9 billion will be auctioned in the modified Dutch auction format. The bids are provided in terms of discount rates, indicating the yield that the bidder is willing to accept. The lower the yield, the higher the price. Thus, the \$6 billion from Bidder Z is the first accepted bid. The \$3 billion from Bidder Y is the second and final bid accepted, at a discount rate of 4.49%, which will be the yield that both Y and Z will receive and will correspond to a single price they each pay.

### Question #70 of 185

Question ID: 413585

A firm can determine its profit-maximizing quantity of output by producing up to the quantity at which:

- ☒ **A) marginal revenue equals marginal cost.**
- ☐ **B) total revenue equals total cost.**
- ☐ **C) average revenue equals average total cost.**

#### Explanation

At the profit-maximizing quantity of output, marginal revenue equals marginal cost. The quantity for which total revenue equals total cost, or average revenue equals average total cost, is the firm's breakeven point.

### Question #71 of 185

Question ID: 413492

When a tax on a good or service is imposed on the producers of the good or service, the:

- ☒ **A) supply will decrease, but the incidence of the tax falls on both buyers and sellers.**
- ☐ **B) supply will decrease, but the incidence of the tax falls on the sellers only.**

☒ C) demand will decrease, but the incidence of the tax falls on both buyers and sellers.

#### Explanation

When a tax is imposed on the producers of a good or service, they will reduce supply at any given level or market price, because they receive the market price minus the tax. However, the incidence of the tax, meaning how its cost is shared, falls on both the buyers and the sellers, depending upon the relative elasticities of supply and demand.

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### Question #72 of 185

Question ID: 413557

A worker is *most likely* to earn economic rent when the marginal revenue product (MRP) from her labor and the supply curve for her type of labor exhibit which of the following characteristics?

- | <u>MRP</u>                                  | <u>Supply curve</u> |
|---|---------------------|
| <input checked="" type="checkbox"/> A) High | <b>Less elastic</b> |
| <input checked="" type="checkbox"/> B) Low  | Less elastic        |
| <input checked="" type="checkbox"/> C) High | More elastic        |

#### Explanation

Economic rent is the difference between the price paid for a resource and its opportunity cost in its next-highest-valued employment. To earn economic rent, a worker must generate a high marginal revenue product. The less elastic its supply curve, the more of the wage is economic rent. Popular entertainers and professional athletes, for example, earn economic rent because their services are valued much more highly in those occupations (high MRP) than they would be in their next-best alternative, and very few people possess their specific skills (inelastic supply).

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### Question #73 of 185

Question ID: 413448

According to the law of demand, as the price of a good increases, the quantity demanded of that good:

- ☒ A) increases.
- ☒ B) decreases.
- ☒ C) does not change.

#### Explanation

The law of demand states that an increase in the price of a good will cause the quantity demanded to decrease.

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### Question #74 of 185

Question ID: 413508

A minimum wage is an example of which of the following?

- ☒ A) Rent controls.
- ☒ B) A price ceiling.



✓ **C) A price floor.**

#### Explanation

A minimum wage is an example of a price floor.

---

### Question #75 of 185

Question ID: 413514

Which of the following *most* accurately describes the impact of a price ceiling set below the equilibrium price for a good and a minimum wage set above the equilibrium wage, respectively?

- ☒ **A) Surplus; increased unemployment.**
- ✓ **B) Shortage; increased unemployment.**
- ☒ **C) Shortage; decreased unemployment.**

#### Explanation

A ceiling that is below the equilibrium price for a good will result in a shortage characterized by a quantity demanded that is greater than the quantity supplied. A minimum wage leads to increased unemployment as firms tend to substitute capital for labor. Even though there are often a large number of unemployed low-skilled workers who may be willing to work at a wage lower than the minimum wage, firms cannot legally hire them.

---

### Question #76 of 185

Question ID: 413580

John Klement is a soybean farmer who harvests 125,000 bushels of soybeans annually. Klement's fixed costs are \$200,000 and his variable costs are \$5 per bushel. Soybeans are currently priced at \$5.35 per bushel. Based on his estimates, Klement sees soybean prices being relatively stable for the next two years, then increasing to \$7.00 per bushel due to increased demand from Japan. What action should Klement take? Klement should:

- ✓ **A) continue operating his business as usual.**
- ☒ **B) shut down for two years and then restart his business.**
- ☒ **C) cut his production by 50% for the next two years and then resume full production.**

#### Explanation

Since Klement is selling soybeans, a common commodity, he is a price taker and therefore can not adjust the price. He should continue operating his business as normal as he is currently covering variable costs and part of fixed costs. In two years from now, he will be able to cover both fixed and variable costs and be able to make a substantial profit.

---

### Question #77 of 185

Question ID: 413491

The actual incidence of a tax imposed on buyers or sellers is *most* accurately defined as:

- ✓ **A) the proportion of the tax burden borne by buyers and sellers.**
- ☒ **B) the amount of tax times the equilibrium quantity.**

☒ C) the party legally responsible for paying the tax.

#### Explanation

Tax revenue is the amount of a tax times the equilibrium quantity. Statutory tax incidence refers to who is legally responsible for paying a tax. Actual tax incidence represents the extent to which buyers bear the cost of the tax through a higher price paid and sellers bear the cost through a lower price received.

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### Question #78 of 185

Question ID: 413615

Based on the concept of diminishing returns, as the quantity of output increases, the short-run marginal costs of production eventually:

- ☒ A) rise at a decreasing rate.
- ☒ B) fall at a decreasing rate.
- ☒ C) rise at an increasing rate.

#### Explanation

The law of diminishing returns states that as more variable resources are a production process combined with a fixed input, output will eventually increase at a decreasing rate. In the short run, as the quantity produced rises, costs rise at an increasing rate.

---

### Question #79 of 185

Question ID: 413599

Typically, the short-run marginal product curve for an input used in production:

- ☒ A) decreases proportionately to output.
- ☒ B) increases initially, reaches a peak, and then declines.
- ☒ C) increases proportionately to output.

#### Explanation

The marginal product curve for an input typically increases initially, reaches a peak at some point, and then decreases (marginal cost increases) as additional units of the input are used, holding the quantities of other factors constant.

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### Question #80 of 185

Question ID: 413609

Are the following two statements about the marginal revenue product (MRP) of a factor of production accurate?

Statement 1: In a price taker market, the MRP of an input is the marginal product of the input multiplied by the price of the output it generates.

Statement 2: If we compare any two productive inputs, the one with the higher MRP will earn greater economic rent.

Statement 1    Statement 2

- |   |           |
|---|-----------|
| <input type="radio"/> A) Correct            | Correct   |
| <input checked="" type="radio"/> B) Correct | Incorrect |
| <input type="radio"/> C) Incorrect          | Correct   |

#### Explanation

Statement 1 is correct. MRP is the addition to total revenue from selling the output generated by one more unit of input. In a price taker market (i.e., perfect competition), marginal revenue is equal to price. Therefore, the MRP is the marginal product of the input times the output price. Statement 2 is incorrect. The extent to which a factor of production earns economic rent depends on the shape of its supply curve. An input with a high MRP might earn very little economic rent if the supply of the input is highly elastic. An input with a relatively lower MRP can earn significant economic rent if its supply is highly inelastic.

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### Question #81 of 185

Question ID: 413604

A firm should continue adding to its capital until the marginal revenue product of capital is:

- ☐ A) equal to the marginal revenue product of labor.
- ☒ B) equal to the cost of capital.
- ☐ C) greater than the cost of capital.

#### Explanation

A firm should continue to accept capital projects until the marginal revenue product of capital (the value added) is equal to the cost of capital. Prior to this point, the firm gains from each unit of capital added.

---

### Question #82 of 185

Question ID: 413553

A good for which consumers exhibit a negative income effect that is smaller than the substitution effect is *most accurately* described as a(n):

- ☐ A) Veblen good.
- ☒ B) inferior good.
- ☐ C) Giffen good.

#### Explanation

For an inferior good the income effect is negative. A Giffen good is an inferior good for which the negative income effect is larger than the positive substitution effect, resulting in a decrease in consumption in response to a decrease in price. A Veblen good is not an inferior good, but rather a good that provides more utility to a consumer at a higher price than it provides at a lower price because the status benefits of ownership are greater at higher prices.

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### Question #83 of 185

Question ID: 413455

A shift along the demand curve for a good is *most likely* to result from a change in:

- ✓ **A) the price of the good.**
- ✗ **B) the price of a related good.**
- ✗ **C) consumers' income.**

#### Explanation

Demand curves illustrate the negative relationship between price and quantity demanded. A change in the price of the good represents a shift along a demand curve. Changes in income or the prices of related goods (complements or substitutes) represent shifts of the demand curve (i.e., changes in the quantity demanded at each price).

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### Question #84 of 185

Question ID: 413496

Which of the following is the *most likely* effect of a quota on wheat?

- ✗ **A) Marginal costs will be greater than marginal benefit.**
- ✗ **B) The supply curve will shift downward.**
- ✓ **C) Nothing if the quota is set above the equilibrium quantity.**

#### Explanation

A quota does not cause the supply curve to shift. The equilibrium quantity will decrease to the quota amount. Marginal cost will be less than marginal benefit, leading to a deadweight loss from underproduction.

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### Question #85 of 185

Question ID: 413575

Which of the following *most* accurately describes the relationship between the average total cost (ATC) curve and the average variable cost (AVC) curve? The vertical distance between the ATC and AVC curves:

- ✗ **A) increases and then decreases as output increases.**
- ✓ **B) decreases as output increases.**
- ✗ **C) increases as output increases.**

#### Explanation

The vertical distance between the ATC curve and AVC cost curve is average fixed cost, which decreases as output increases because more output is averaged over the same cost.

---

### Question #86 of 185

Question ID: 413485

The demand function for a good is: Quantity =  $600 - 5 \times \text{own price}$ . At an equilibrium price of 30, consumer surplus is *closest* to:

- ✗ **A) 36,000.**
- ✓ **B) 20,250.**
- ✗ **C) 450.**

### Explanation

Consumer surplus is the area of the triangle (one-half  $\times$  base  $\times$  height) formed by the demand function, the equilibrium price, and the vertical axis.

The demand function intersects the vertical axis at the price at which quantity demanded equals zero:  $0 = 600 - 5P$ ,  $P = 120$ . Thus the height of the triangle is  $120 - 30 = 90$ .

The quantity demanded at the equilibrium price of 30 is:  $600 - 5(30) = 450$ . This is the base of the triangle.

The area of the triangle is  $\frac{1}{2} \times 90 \times 450 = 20,250$ , which is consumer surplus.

---

### Question #87 of 185

Question ID: 413458

If a change in consumer tastes causes a permanent downward shift in demand for hats, but there are no changes in the cost of inputs to production of hats, the *most likely* market response would be:

- ☐ A) a short-run shift in the supply curve, causing a decline in the price of hats.
- ☐ B) no change in the price of hats because the costs of production have not changed.
- ☒ C) a short-term movement along the supply curve to a lower equilibrium price, and a long-run shift in supply.

### Explanation

If the costs of production do not change, the supply curve for hats will not shift in the short run in response to a decrease in demand. Instead, there will be a movement along the supply curve to a new, lower, equilibrium price, followed by a long-run shift in the supply curve as producers exit the business.

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### Question #88 of 185

Question ID: 413613

At a fixed level of capital, output increases as the quantity of labor increases, but at a decreasing rate. This phenomenon is an example of:

- ☒ A) law of diminishing returns to labor.
- ☐ B) law of diminishing returns to capital.
- ☐ C) law of diminishing costs to labor.

### Explanation

The law of diminishing returns states that at some point, as more and more of a resource (e.g., labor) is devoted to a production process, holding the quantity of other inputs constant, the output increases, but at a decreasing rate.

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### Question #89 of 185

Question ID: 413480

Producer surplus is *best* defined as the:

- ☐ A) number of units by which the supply is greater than the quantity demanded by consumers.
- ☐ B) amount by which the price of the next unit of a good exceeds the consumer's marginal benefit from the good.
- ☒ C) sum of the differences between the price of each unit of a good and its opportunity cost.

Explanation

The sum of the differences between price and opportunity cost is producer surplus.

---

**Question #90 of 185**

Question ID: 413570

Marginal cost is *most* accurately defined as the:

- ☐ A) cost that a consumer must incur to consume an additional unit of a good or service.
- ☐ B) value of the good or service that a consumer must forego in order to consume an additional unit of a good or service.
- ☒ C) cost of producing one more unit of a good or service.

Explanation

Marginal cost is the cost of producing one more unit of output.

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**Question #91 of 185**

Question ID: 413490

Which of the following statements about a tax imposed on buyers or suppliers is *most* accurate?

- ☒ A) If demand is less elastic than supply, consumers will bear a higher proportion of the tax than suppliers.
- ☐ B) If demand is less elastic than supply, consumers will bear a lower proportion of the tax than suppliers.
- ☐ C) The proportion of the tax is borne equally by consumers and suppliers, regardless of supply and demand elasticity.

Explanation

If demand is less elastic than supply, consumers will bear a higher proportion of the tax than suppliers. If supply is less elastic than demand, suppliers will bear a higher proportion of the tax than consumers.

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**Question #92 of 185**

Question ID: 413482

Equilibrium in a perfectly competitive market results in a quantity for which the:

- ☐ A) consumer and producer surpluses are equal.

- ☐ B) producer surplus equals zero.
- ☒ C) sum of consumer and producer surpluses is maximized.

#### Explanation

In a competitive market, the equilibrium quantity is the one for which the sum of the consumer and producer surpluses is maximized.

---

### Question #93 of 185

Question ID: 413539

The assumption that consumers prefer more of a good to less is *best* described as the condition of:

- ☐ A) complete preferences.
- ☐ B) **utility maximization.**
- ☒ C) non-satiation.

#### Explanation

The condition of non-satiation specifies that more consumption is preferred to less consumption of a good.

---

### Question #94 of 185

Question ID: 413519

If the price elasticity of a linear demand curve is  $-1$  at the current price, an increase in price will lead to:

- ☒ A) a decrease in total revenue.
- ☐ B) **no change in total revenue.**
- ☐ C) an increase in total revenue.

#### Explanation

On a linear demand curve, demand is elastic at prices above the point of unitary elasticity, so a price increase will decrease total revenue.

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### Question #95 of 185

Question ID: 460641

Hanover Industrial operates a factory in Paris, which produces goods at a marginal cost above marginal revenue, and a factory in Munich, which produces identical goods at a marginal cost less than marginal revenue. To maximize profits, Hanover should *most likely*:

- ☒ A) decrease output at the Paris factory and increase output at the Munich factory.
- ☐ B) **decrease output at both factories.**
- ☐ C) increase output at the Paris factory and decrease output at the Munich factory.

#### Explanation

Since the Munich plant is generating revenues greater than costs and the Paris plant is not, Hanover should increase output at

the Munich plant and reduce output at the Paris plant.

---

### Question #96 of 185

Question ID: 413483

Producer surplus is *most* accurately defined as the:

- ☐ A) difference between the opportunity cost of producing the last unit of a good or service and the price received for that unit.
- ☒ B) **sum of the differences between the price received for each unit of good produced and the opportunity cost of each unit.**
- ☐ C) sum of the differences between the marginal benefit and the marginal cost for each unit of good produced and consumed over the total number of units produced and consumed.

#### Explanation

Producer surplus is the sum of the differences between the price received for each unit of good produced and the opportunity cost of each unit, for the total units produced. Producer surplus results when the market price for a good or service exceeds the marginal cost producing it.

---

### Question #97 of 185

Question ID: 413569

Holding other input quantities constant, which of a firm's factors of production *most likely* exhibit diminishing marginal productivity as the firm uses an increasing quantity of the input(s)?

- ☐ A) Labor only.
- ☐ B) **Capital only.**
- ☒ C) Both labor and capital.

#### Explanation

Both labor and capital inputs exhibit diminishing marginal productivity as input quantities increase, holding other input quantities constant.

---

### Question #98 of 185

Question ID: 413611

Holding the quantity of labor constant, output increases as the quantity of capital increases, but at a decreasing rate. This phenomenon is *most* accurately described as:

- ☒ A) diminishing marginal product of capital.
- ☐ B) **diminishing marginal costs of capital.**
- ☐ C) diminishing average returns to capital.

#### Explanation

The marginal product of capital is the change in output divided by a unit change in capital, holding labor constant. Diminishing



marginal product of capital means that at a constant level of labor, output increases as capital is added, but at a decreasing rate.

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### Question #99 of 185

Question ID: 413499

Which of the following is *least* accurate regarding obstacles to the efficient allocation of resources in a competitive market?

- ☐ A) Quotas result in production of less than the efficient quantity of the good.
- ☐ B) **Subsidies lead to production of more than the efficient quantity of the good.**
- ☒ C) Public goods, such as national defense, tend to be overproduced because they can be consumed by everyone whether they pay for the goods or not.

#### Explanation

Public goods can be consumed by every member of a society, regardless of whether they paid for them or not. In a competitive market for public goods, fewer goods than the efficient quantity would be produced because it is not in each person's interest to pay their share of the cost.

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### Question #100 of 185

Question ID: 413477

Which of the following statements *most accurately* describes what will occur in an unrestricted economy when tastes change so that marginal benefit exceeds marginal cost at the current quantity produced and sold of a good or service?

- ☐ A) The quantity of other goods and services produced will increase.
- ☐ B) **The quantity consumed will decrease.**
- ☒ C) The quantity of the good or service produced will increase.

#### Explanation

In an unrestricted economy, the efficient quantity is the one for which the marginal benefit equals the marginal cost. When marginal benefit is greater than marginal cost at a given quantity, producers will produce more since consumers are willing to pay more than the cost of production.

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### Question #101 of 185

Question ID: 413531

If the price elasticity of demand is -1.5 and the price of the product increases 2%, the quantity demanded will:

- ☐ A) decrease approximately 1.5%.
- ☐ B) **decrease approximately 0.75%.**
- ☒ C) decrease approximately 3%.

#### Explanation

If the price elasticity of demand is -1.5, and you increase the price of the product 2%, the quantity demanded will decrease approximately 3%. When the price elasticity is negative, it means that price and demand move in opposite directions. Given a price decrease, demand will increase and vice versa. The absolute value, 1.5, indicates that demand will move one-and-a-half

times as much as price.

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### Question #102 of 185

Question ID: 413552

Which of the following is *most likely* to cause a decrease in the consumption of a good in response to a decline in the price of the good?

- ✓ **A) Income effect.**
- ✗ **B) Law of demand.**
- ✗ **C) Substitution effect.**

#### Explanation

The income effect can be negative if the good is an inferior good. The substitution effect is always positive and will cause consumption of a good to increase if the price declines. The law of demand assumes that a decrease in the price of a good will cause an increase in the quantity demanded.

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### Question #103 of 185

Question ID: 413454

The *most likely* cause for a shift in the supply curve for coffee is a change in the:

- ✗ **A) price of tea.**
- ✓ **B) wages of coffee harvesters.**
- ✗ **C) price of coffee.**

#### Explanation

The supply curve shifts in response to a change in the cost of inputs, such as the wages for coffee harvesters. A change in the price of the product is a movement along the supply curve, not a shift in the curve. A change in the price of a substitute would more likely influence the demand curve, not the supply curve.

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### Question #104 of 185

Question ID: 413564

The demand curve for a firm's output is represented by the following table:

Quantity	1	2	3	4	5	6	7	8
Price per unit	11	10	9	8	7	6	5	4

At what quantity of output is total revenue maximized?

- ✗ **A) 7.**
- ✓ **B) 6.**
- ✗ **C) 8.**

#### Explanation

Quantity	1	2	3	4	5	6	7	8
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Price per unit	11	10	9	8	7	6	5	4
Total revenue = P × Q	11	20	27	32	35	36	35	32

Total revenue is maximized at 6 units of output.

**Question #105 of 185**
Question ID: 413469

Given the supply function,  $Q_s = -600 + 80P$ , the demand function,  $Q_d = 1500 - 70P$ , and an equilibrium price of 14, the amount of excess supply or demand at a price of 17 is:

- ☒ A) excess demand of 520.
- ☒ B) **excess demand of 480.**
- ☒ C) excess supply of 450.

Explanation

Plug in the price of 17 and solve for quantity supplied and quantity demanded:

$Q_s = -600 + 80(17); Q_s = 760$   
 $Q_d = 1500 - 70(17); Q_d = 310$

At a price of 17, quantity supplied is greater than quantity demanded. Excess supply =  $760 - 310 = 450$ .

**Question #106 of 185**
Question ID: 413536

Gene Bawerk, an economics professor, is lecturing on the factors that influence the price elasticity of demand. He makes the following assertions:

- Statement 1: For most goods, demand is more elastic in the long run than the short run.
- Statement 2: Demand for a good becomes more elastic when a close substitute for it becomes available on the market.

With respect to Bawerk's statements:

- ☒ A) only statement 2 is correct.
- ☒ B) **only statement 1 is correct.**
- ☒ C) both are correct.

Explanation

Both of these statements are accurate. Price elasticity for most goods is greater in the long run because individuals can make long-term decisions that require different quantities of the good, such as buying more fuel efficient vehicles to use less gasoline. Price elasticity is greater the better the available substitutes because an increase in price will lead more buyers to switch to the substitute products.

### Question #107 of 185

Question ID: 413537

The demand for a product tends to be price inelastic if:

- ☐ A) few good complements for the product are available.
- ☐ B) **people spend a large share of their income on the product.**
- ☒ C) few good substitutes for the product are available.

#### Explanation

If a large price change results in a small change in quantity demanded, demand is inelastic. Cigarettes are an example of a good with inelastic demand.

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### Question #108 of 185

Question ID: 413479

If a consumer is willing to pay \$20 for a shirt but only has to pay \$16, the \$4 difference is:

- ☐ A) **consumer deficit.**
- ☒ B) consumer surplus.
- ☐ C) producer surplus.

#### Explanation

If a consumer is willing to pay \$20 for a shirt but only pays \$16 for the shirt, the \$4 difference is consumer surplus. The consumer surplus plus the market price equals the total value of the product to the consumer.

---

### Question #109 of 185

Question ID: 413524

If quantity demanded increases 15% when the price drops 1%, demand for this good:

- ☒ A) **elastic, but not perfectly elastic.**
- ☐ B) inelastic, but not perfectly inelastic.
- ☐ C) perfectly elastic.

#### Explanation

Whenever quantity demanded for a good changes by a greater percentage than price, the price elasticity of demand will be greater than 1.0 and demand for the product is considered to be elastic.

---

### Question #110 of 185

Question ID: 413543

When modeling consumer decision making, indifference curves:

- ☒ A) **represent consumption bundles that have equal total utility to the consumer.**
- ☐ B) represent the set of affordable consumption bundles.
- ☐ C) reflect an increasing marginal rate of substitution.

### Explanation

Indifference curves reflect consumption bundles that have the same total utility to the consumer, whether or not they are affordable. Indifference curves reflect a diminishing marginal rate of substitution.

---

### Question #111 of 185

Question ID: 413456

A price for a good above the equilibrium price will result in a situation of:

- ✓ **A) excess supply.**
- ✗ B) excess demand.
- ✗ C) underproduction.

### Explanation

At prices above equilibrium, suppliers are willing to produce a greater quantity than buyers are willing to purchase. This is an excess supply condition. Competition among suppliers leads to downward pressure on prices until the market reaches equilibrium price and quantity.

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### Question #112 of 185

Question ID: 413520

If quantity demanded increases 20% when the price drops 2%, this good exhibits:

- ✗ **A) inelastic, but not perfectly inelastic, demand.**
- ✓ B) elastic, but not perfectly elastic, demand.
- ✗ C) perfectly inelastic demand.

### Explanation

If quantity demanded increases 20% when the price drops 2%, this good exhibits elastic demand. Whenever demand changes by a greater percentage than price, demand is considered to be elastic.

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### Question #113 of 185

Question ID: 413587

Which of the following *most* accurately describes economies of scale? Economies of scale:

- ✓ **A) occur when long-run unit costs fall as output increases.**
- ✗ B) are dependent on short-run average costs.
- ✗ C) increase at a decreasing rate.

### Explanation

Economies of scale occur when the percentage increase in output is greater than the percentage increase in the cost of all inputs. Economies of scale occur over the range where the long-run average cost curve slopes downward.

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### Question #114 of 185

Question ID: 413516

The cross price elasticity of demand for a substitute good and the income elasticity for an inferior good are:

<u>Cross elasticity</u>	<u>Income elasticity</u>
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- ✓ A)  $> 0$                        $< 0$
- ✗ B)  $< 0$                        $< 0$
- ✗ C)  $< 0$                        $> 0$

#### Explanation

The cross price elasticity of substitutes is positive, and the income elasticity of an inferior good is negative.

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### Question #115 of 185

Question ID: 413494

The decrease in production and trade as a result of a tax is called:

- ✗ A) total tax incidence.
- ✗ B) statutory incidence.
- ✓ C) deadweight loss.

#### Explanation

When the equilibrium quantity for a product or service is reduced as the result of a tax, this is called the deadweight loss. This represents the loss, in terms of production and trade, that results from the presence of the tax.

---

### Question #116 of 185

Question ID: 413591

The short run is best defined as:

- ✗ A) the period for which the quantities of all factors of production are fixed.
- ✗ B) the time frame within which working capital decisions cannot be altered.
- ✓ C) the period for which the quantities of some resource inputs are fixed.

#### Explanation

The short run is typically defined as the period for which the quantities of some, but not all, resources are fixed. Working capital is the difference between a firm's current assets and current liabilities and consists of items (such as cash) that the firm can adjust in the short run.

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### Question #117 of 185

Question ID: 413450

Other things equal, an increase in the price of a good will increase:

- ☐ A) neither quantity supplied nor quantity demanded.
- ☐ B) quantity demanded.
- ☒ C) quantity supplied.

Explanation

Producers of a good are typically willing to supply a greater quantity of a good when its price increases.

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**Question #118 of 185**

Question ID: 413533

Income elasticity is defined as the:

- ☐ A) change in quantity demanded divided by the change in income.
- ☐ B) percentage change in income divided by the percentage change in the quantity demanded.
- ☒ C) percentage change in the quantity demanded divided by the percentage change in income.

Explanation

Income elasticity is defined as the percentage change in quantity demanded divided by the percentage change in income. Normal goods have positive values for income elasticity and inferior goods have negative income elasticities.

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**Question #119 of 185**

Question ID: 434232

Price elasticity of demand is *most* accurately defined as the change in:

- ☐ A) quantity demanded in response to a change in income.
- ☐ B) market price in response to a change in the quantity demanded.
- ☒ C) quantity demanded in response to a change in market price.

Explanation

$$\text{Price elasticity of demand} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

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**Question #120 of 185**

Question ID: 413581

Suppose a price-taker firm produces baseball bats that sell at a price of \$100 each. This firm's average total cost at the current level of production is \$150 per bat, and the average fixed cost is \$40 per bat. Which of the following statements is *most* accurate regarding this firm? They should:

- ☒ A) shut down in the short run because their average variable cost is greater than their price.
- ☐ B) shut down in the short run because their average total cost is greater than their price.

☒ **C)** continue producing baseball bats because they are covering their fixed costs.

Explanation

Variable costs = \$150 (ATC) – \$40 (AFC) = \$110 (AVC). At a selling price of \$100 the firm is not covering its variable costs and will have losses greater than its fixed costs if it stays in business.

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**Question #121 of 185**

Question ID: 413561

Which of the following *most* accurately describes economic profit? Economic profits are zero when:

- ☒ **A) total revenue equals the sum of all opportunity costs.**
- ☒ **B)** implied rental rates equal forgone interest.
- ☒ **C)** implicit costs equal explicit costs.

Explanation

Economic profit are zero when total revenues are just equal to the sum of all opportunity costs, which includes all implicit and explicit costs.

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**Question #122 of 185**

Question ID: 413528

If the demand curve for a given product is a straight line, this indicates that:

- ☒ **A) elasticity is constant along the demand curve.**
- ☒ **B)** demand is unit elastic.
- ☒ **C)** demand is more elastic at higher prices.

Explanation

Elasticities will be greater (in absolute value) at higher prices.

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**Question #123 of 185**

Question ID: 413549

With respect to utility theory, the income effect for a decrease in the price of a good:

- ☒ **A) will increase consumption of the good.**
- ☒ **B)** will decrease consumption of the good.
- ☒ **C)** may increase or decrease consumption of the good.

Explanation

The income effect for a decrease in price may be positive (for a normal good) or negative (for an inferior good). Therefore, the income effect from a price decrease may be to increase or decrease consumption of a good.

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### Question #124 of 185

Question ID: 413607

Marginal revenue product is *best* defined as the:

- ☒ A) additional output that results from employing one more unit of a productive input.
- ☐ B) gain in total revenue from selling one more unit of output.
- ☒ C) addition to total revenue from selling the additional output from using one more unit of an input.

#### Explanation

The marginal revenue product is the addition to total revenue from selling the additional output that one more unit of an input can produce. The additional output that results from employing one more unit of a productive input is the marginal product. The gain in total revenue from selling one more unit of output is the marginal revenue. A marginal revenue product exists for any level of output; it is not limited to the level at which marginal revenue equals marginal cost.

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### Question #125 of 185

Question ID: 413594

Which of the following statements about supply curves is *least* accurate? The:

- ☒ A) supply curve for the market is typically more elastic over the short run than the long run.
- ☐ B) long-run supply curve for decreasing cost industries slopes downward to the right.
- ☐ C) long-run supply curve for constant cost industries is horizontal.

#### Explanation

The supply curve for products is typically more elastic over a longer time period than over a shorter period.

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### Question #126 of 185

Question ID: 413504

The government imposes a tax on a good. The relative amounts of the tax that each economic actor in the market plays is called the:

- ☐ A) deadweight loss.
- ☐ B) statutory tax.
- ☒ C) tax incidence.

#### Explanation

This is the definition of the incidence of a tax. It is determined by the shape of the supply and demand curves, not upon whom the tax is imposed legally (the statutory incidence of the tax).

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### Question #127 of 185

Question ID: 413551

When the price of a good decreases, how do the income effect and the substitution effect change the quantity demanded of the good?

- ✓ **A) The substitution effect increases the quantity demanded, but the income effect may increase or decrease the quantity demanded.**
- ✗ **B) Both the income effect and the substitution effect increase the quantity demanded.**
- ✗ **C) The income effect increases the quantity consumed, but the substitution effect may increase or decrease the quantity demanded.**

#### Explanation

The substitution effect is a shift in consumption toward a larger quantity of a good that decreases in price. A decrease in the price of a good also has an income effect because the old bundle costs less. The income effect may result in consumption of a larger or smaller quantity of the good that has decreased in price, depending on whether it is a normal good or an inferior good.

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### Question #128 of 185

Question ID: 413605

The quantity of labor that a profit maximizing firm will employ, holding other input factors constant, is the level at which:

- ✓ **A) the marginal revenue product of labor is equal to the wage rate.**
- ✗ **B) one more unit of labor would cost less than the value of its additional output.**
- ✗ **C) the marginal product of labor is equal to the marginal cost of labor.**

#### Explanation

For any productive input, including labor, a profit maximizing firm will employ additional units of the input until its marginal revenue product is equal to its price (the wage rate is the price of labor). If one more unit of labor would cost less than the value of its additional output, the firm will increase profits by adding that unit. Marginal product is measured in units of output and cannot be compared directly to marginal cost, which is measured in units of money.

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### Question #129 of 185

Question ID: 413466

Twenty firms in a region's gravel market have identical supply functions of  $QS = -2,000 + 25P$ . The market supply curve (inverse supply function) is:

- ✓ **A)  $P = 0.002QS + 80$**
- ✗ **B)  $P = 0.04QS + 80$**
- ✗ **C)  $QS = -40,000 + 500P$**

#### Explanation

The aggregate supply function is:

$$QS = 20(-2,000) + 20(25)P$$

$$QS = -40,000 + 500P$$

The market supply curve (inverse supply function) is:

$$500P = QS + 40,000$$

$$P = (1 / 500)QS + (40,000 / 500)$$

$$P = 0.002QS + 80$$

---

### Question #130 of 185

Question ID: 413589

Which of the following is *least* accurate with regard to the long-run and the short-run?

- ☒ A) Long-run cost curves pertain to plants of different sizes.
- ☐ B) In the long-run, all costs are variable.
- ☒ C) In the short run, only plant size is fixed.

#### Explanation

In the short-run, labor is major variable cost. Plant size, in addition to technology and equipment, are fixed.

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### Question #131 of 185

Question ID: 413472

The demand function for textbooks is given by  $100 - 2P$ , and the supply function is given by  $2P - 10$ . At a price of 30, the market:

- ☒ A) has excess supply of 10.
- ☐ B) has excess demand of 10.
- ☐ C) is in equilibrium with quantity supplied and demanded equal to 45.

#### Explanation

At a price of 30, quantity demanded =  $100 - 2(30) = 40$ , and quantity supplied =  $2(30) - 10 = 50$ . Excess supply =  $50 - 40 = 10$ .

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### Question #132 of 185

Question ID: 413443

For which of the following items would the market be *best* characterized as a factor market?

- ☒ A) Crude oil.
- ☐ B) Beer.
- ☐ C) Clothing.

#### Explanation

Crude oil is most often purchased as a factor of production for other goods, such as gasoline. Because beer and clothing are primarily purchased by consumers as finished goods, the markets for these goods are best characterized as product markets.

---

### Question #133 of 185

Question ID: 413515

A good is *most likely* to demonstrate higher price elasticity of demand:

- ☐ A) if it represents a small portion of the consumer's budget, than if it represents a large portion.
- ☐ B) when there are few substitutes for the good, than when there are many good substitutes.
- ☒ C) in the long run than the short run.

#### Explanation

A good is likely to show a high price elasticity of demand when there are good substitutes, it represents a large proportion of consumer spending, and in the long run as consumers make changes that take time to implement in response to price changes for the good.

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### Question #134 of 185

Question ID: 472408

Assume that for the average consumer, the quantity demanded for gasoline increases from 15 gallons per week to 20 gallons per week response to a price decrease from \$2.90 per gallon to \$2.46 per gallon. The elasticity of demand for gasoline is *closest to*:

- ☐ A) -1.65
- ☒ B) -1.74
- ☐ C) -1.86

#### Explanation

Elasticity of demand is the percent change in quantity demanded divided by the percent change in price, where the percent changes are calculated by dividing the change in value by the average value. The percent change in quantity demanded is  $(20 - 15) / [(20 + 15) / 2] = 28.57\%$ . The percent change in price is  $(2.46 - 2.90) / [(2.90 + 2.46) / 2] = -16.42\%$ . Thus, elasticity =  $28.57\% / -16.42\% = -1.74$ .

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### Question #135 of 185

Question ID: 413442

Markets for produced goods that are used in the production of finished goods are *best* described as:

- ☐ A) capital markets.
- ☒ B) intermediate goods markets.
- ☐ C) service markets.

#### Explanation

Intermediate goods are used in the production of finished goods. Services are finished goods and capital markets refer to markets where firms raise money.

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### Question #136 of 185

Question ID: 413614

According to the law of diminishing returns, doubling the number of salespeople for a firm will *most likely* result in:

- ☒ A) decreasing the total sales of the firm as a result of competition amongst salespeople.
- ☒ B) increasing the total sales of the firm and reducing the average sales per salesperson.
- ☒ C) doubling the total sales of the firm.

Explanation

The law of diminishing returns states that as more of a resource is added to a production process, holding other resource use constant, increases in output will eventually decrease. Therefore, as more salespeople are added they will generate more sales at a decreasing rate. Total sales will increase and the average sales per salesperson will decrease.

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**Question #137 of 185**

Question ID: 413457

The demand function for a good is  $QD = 2000 - 125P$  and its supply function is  $QS = -400 + 75P$ . At a price of \$10, the market for this good exhibits:

- ☒ A) excess supply.
- ☒ B) an equilibrium.
- ☒ C) excess demand.

Explanation

At  $P = \$10$ ,  $QD = 2000 - 125(10) = 750$  and  $QS = -400 + 75(10) = 350$ . Quantity demanded is greater than quantity supplied at this price, so the market exhibits excess demand.

---

**Question #138 of 185**

Question ID: 413578

In the long run, if price is below average total cost (ATC) the firm will:

- ☒ A) shut down.
- ☒ B) keep running.
- ☒ C) cover its variable costs.

Explanation

If the price is below ATC then the firm is losing money. If the firm believes the price will never exceed ATC the only way to eliminate fixed costs is to go out of business.

---

**Question #139 of 185**

Question ID: 472407

George's Appliance Center sells big screen televisions. When the price of one model was reduced from \$2,450 to \$2,275, monthly demand increased from 175 to 211 units. The elasticity of demand is *closest to*:

- ☐ A) -2.14
- ☒ B) -2.53
- ☐ C) -1.69

#### Explanation

Arc elasticity of demand = Percent change in quantity demanded / percent change in price

Percent change in quantity =  $(211 - 175) / [(211 + 175) / 2] = 0.187$

Percent change in price =  $(2,275 - 2,450) / [(2,275 + 2,450) / 2] = -0.074$

Arc elasticity of demand =  $0.187 / -0.074 = -2.53$

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### Question #140 of 185

Question ID: 413606

A shop foreman determines that an employee would produce two more units of output if he worked one additional hour. The product currently sells for \$15.00 per unit and the firm is a price taker. Which of the following choices *most* accurately describes the relationship between the marginal revenue (MR) and marginal revenue product (MRP) from the additional hour of labor input?

- ☐ A) **MRP = MR.**
- ☐ B) **MR = \$15 and MRP < MR.**
- ☒ C) **MRP > MR.**

#### Explanation

By definition, the MR is the addition to total revenue from selling *one* more unit of output. The MRP is the revenue from selling the marginal product, which in this example is *two* units. Therefore the MRP must be greater than the MR.

---

### Question #141 of 185

Question ID: 413511

If a price ceiling is above the equilibrium price in a given market, its effect will *most likely* be:

- ☐ A) **a surplus.**
- ☐ B) **a shortage.**
- ☒ C) **nothing.**

#### Explanation

A ceiling is only effective if it is below the equilibrium price. If it is above the equilibrium price, then it should have no effect. If the ceiling is below the equilibrium price, it will produce a shortage. In such a case, suppliers do not produce as much as consumers wish to buy at the ceiling price.

---

### Question #142 of 185

Question ID: 413510

New legislation setting a price ceiling will *most likely* cause:

- ☐ A) a decrease in demand.
- ☒ B) a market shortage.
- ☐ C) a market surplus.

#### Explanation

Price ceilings restrict the producer from increasing the selling price. The lower price will stimulate demand by consumers at this lower price. However, since producers will not be able to increase price there is little incentive for them to increase supply. Hence, production and supply will be limited at the price ceiling leading to a market shortage.

---

### Question #143 of 185

Question ID: 413476

Which of the following statements *best* describes the principal difference between a Vickrey auction and other types of sealed bid auctions?

- ☒ A) In a Vickrey auction, the winner pays the price bid by the second-highest bidder.
- ☐ B) A Vickrey auction does not use sealed bids.
- ☐ C) In a Vickrey auction, the winner pays the reservation price.

#### Explanation

A Vickrey auction is a second-price sealed bid auction, in which the winner pays the price bid by the second highest bidder. The reservation price is the highest price that a bidder is willing to pay. In a second price sealed bid auction, a bidder's optimal strategy is to bid his reservation price. Because he pays the second highest bid, the winner pays less than his reservation price.

---

### Question #144 of 185

Question ID: 413488

An example of a price floor is:

- ☐ A) a tax on ceramic tile.
- ☒ B) a minimum price for milk.
- ☐ C) rent control.

#### Explanation

A price floor is a minimum on the price that suppliers can charge. Such floors were once common in agricultural markets.

---

### Question #145 of 185

Question ID: 413526

When demand for a good is inelastic, a higher price will:

- ☐ A) fail to reduce the quantity demanded for the good.
- ☒ B) lead to an increase in total expenditures for the good.

☒ C) have no impact on the demand for the good.

#### Explanation

When demand is relatively inelastic, consumers do not reduce their quantity demanded very much when the price increases. That is, a given percentage increase in price results in a smaller percentage reduction in quantity demanded. Thus, total expenditures on the good increase. "Fail to reduce the quantity demanded for the good" is inaccurate because that would only be true if demand was *perfectly* inelastic.

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### Question #146 of 185

Question ID: 413544

A consumer's income is 1,000. If the price of Good M is 25 and the price of Good N is 30, this consumer's budget line *most likely* includes a bundle of:

- ☒ A) 24 units of Good M and 13 units of Good N.
- ☒ B) 26 units of Good M and 12 units of Good N.
- ☒ C) 22 units of Good M and 15 units of Good N.

#### Explanation

The budget line includes bundles of two goods that just exhaust a consumer's income. For a bundle of 22 units of Good M and 15 units of Good N,  $25 \times 22 + 30 \times 15 = 1,000$ , which is this consumer's income. A bundle of 24 units of Good M and 13 units of Good N does not exhaust this consumer's income and lies below the budget line:  $25 \times 24 + 30 \times 13 = 990$ . A bundle of 26 units of Good M and 12 units of Good N is unaffordable to this consumer and lies above the consumer's budget line:  $25 \times 26 + 30 \times 12 = 1,010$ .

---

### Question #147 of 185

Question ID: 413545

A consumer has income of \$100. If the price of Good L is \$5 and the price of Good M is \$10, which of the following bundles of Good L and Good M is outside the consumer's budget constraint?

- ☒ A) 11 units of Good L and 4 units of Good M.
- ☒ B) 8 units of Good L and 6 units of Good M.
- ☒ C) 5 units of Good L and 8 units of Good M.

#### Explanation

A bundle of goods that lies outside a consumer's budget constraint is unaffordable to that consumer. The cost of 5 units of Good L and 8 units of Good M is  $5 \times \$5 + 8 \times \$10 = \$105$ , which is more than the consumer's income. The cost of 8 units of Good L and 6 units of Good M is  $8 \times \$5 + 6 \times \$10 = \$100$ . The cost of 11 units of Good L and 4 units of Good M is  $11 \times \$5 + 4 \times \$10 = \$95$ . Both of these bundles are within the consumer's budget constraint.

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### Question #148 of 185

Question ID: 485763

Under perfect competition, the market short-run supply curve is the:



- ☐ A) sum of the quantities at each price along the average total cost curve for all firms in a given industry.
- ☒ B) sum of the quantities at each price along the marginal cost curves for all firms in a given industry.
- ☐ C) average of the quantities at each price along the marginal cost curve for all firms in a given industry.

Explanation

The short-run market supply curve is the horizontal sum of the marginal cost curves for all firms in a given industry. It is the sum of all quantities from all firms at each price along each firm's marginal cost curve.

Question #149 of 185

Question ID: 413563

The demand curve for a firm's output is represented by the following table:

Quantity	1	2	3	4	5
Price per unit	12	11	10	9	8

Marginal revenue for the fourth unit of output is:

- ☐ A) 36.
- ☒ B) 6.
- ☐ C) 9.

Explanation

Unit 1: Total revenue =  $1 \times 12 = 12$ ; marginal revenue =  $12 - 0 = 12$ .  
Unit 2: Total revenue =  $2 \times 11 = 22$ ; marginal revenue =  $22 - 12 = 10$ .  
Unit 3: Total revenue =  $3 \times 10 = 30$ ; marginal revenue =  $30 - 22 = 8$ .  
Unit 4: Total revenue =  $4 \times 9 = 36$ ; marginal revenue =  $36 - 30 = 6$ .

Question #150 of 185

Question ID: 413547

The equilibrium bundle of goods for a consumer is the bundle that:

- ☐ A) is at the highest point on the consumer's budget line.
- ☐ B) provides the most utility to the consumer.
- ☒ C) is tangent to the budget line on the highest attainable indifference curve.

Explanation

The equilibrium bundle of goods is the bundle at which a consumer's highest attainable indifference curve is tangent to the consumer's budget line. This bundle provides more utility to the consumer than any other affordable bundle. Bundles on higher indifference curves would provide more utility to the consumer, but those bundles are unaffordable given the consumer's budget constraint.

### Question #151 of 185

Question ID: 413464

A stable market equilibrium is *best* described as one in which:

- ✓ **A) excess supply drives prices lower and excess demand drives prices higher.**
- ✗ **B) the current market price equals the equilibrium price.**
- ✗ **C) the supply curve is less steeply sloped than the demand curve.**

#### Explanation

Stable market equilibria are defined as those in which excess supply tends to drive prices lower and excess demand tends to drive prices higher. Unstable equilibria are characterized by a downward sloping supply curve that is less steeply sloped than the demand curve, so that excess supply tends to drive prices up and excess demand tends to drive prices down (further away from the equilibrium value). The current market price and the equilibrium price can be equal in either stable or unstable equilibria.

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### Question #152 of 185

Question ID: 413588

The upward sloping segment of a long-run average total cost curve represents the existence of:

- ✗ **A) economies of scale.**
- ✓ **B) diseconomies of scale.**
- ✗ **C) efficiencies of scale.**

#### Explanation

Diseconomies of scale occur along the upward sloping segment of the long-run average total cost curve where costs rise as output increases. The flat portion at the bottom of the long-run average total costs curve represents constant returns to scale.

---

### Question #153 of 185

Question ID: 413522

If a good has elastic demand, a small percentage price increase will cause:

- ✓ **A) a larger percentage decrease in the quantity demanded.**
- ✗ **B) a larger percentage increase in the quantity demanded.**
- ✗ **C) a smaller percentage increase in the quantity demanded.**

#### Explanation

If a good has elastic demand, a small price increase will cause a larger decrease in the quantity demanded. Demand is elastic when the percentage change in quantity demanded is larger than the percentage change in price.

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### Question #154 of 185

Question ID: 413497

Which of the following is *least likely* to be considered an obstacle to the efficient allocation of an economy's resources?

- ✓ **A) Changes in consumer tastes.**
- ✗ **B) Rent controls.**
- ✗ **C) Taxes.**

#### Explanation

Price controls and taxes are obstacles to allocative efficiency. Rent controls and minimum wages are examples of price controls. As opposed to being obstacles to the efficient allocation of resources, changes in consumer tastes lead to the reallocation of society's resources, producing a different mix of goods or services that provide increased benefits.

### Question #155 of 185

Question ID: 413468

The market for radios consists of 100 consumers, each of whom has the demand function:

$$QD_{\text{radio}} = 4 - 0.4 P_{\text{radio}} + 0.0025 \text{ Income} + 0.25 P_{\text{newspaper}} - 0.005 P_{\text{batteries}}$$

At current average prices, a radio costs £10, a newspaper costs £1, and batteries cost £2. Average income is £1,000. The market demand curve for radios is most accurately described as:

- ✗ **A)  $400 - 40 P_{\text{radio}} + 0.25 \text{ Income} + 25 P_{\text{newspaper}} - 0.5 P_{\text{batteries}}$ .**
- ✗ **B)  $674 - 40 P_{\text{radio}}$ .**
- ✓ **C)  $16.85 - 0.025 QD_{\text{radio}}$ .**

#### Explanation

Aggregating the individual demand functions into the market demand function we get:

$$QD_{\text{radio}} = 100(4 - 0.4 P_{\text{radio}} + 0.0025 \text{ Income} + 0.25 P_{\text{newspaper}} - 0.005 P_{\text{batteries}})$$

$$QD_{\text{radio}} = 400 - 40 P_{\text{radio}} + 0.25 \text{ Income} + 25 P_{\text{newspaper}} - 0.5 P_{\text{batteries}}$$

Substituting average values for all variables except price we get:

$$QD_{\text{radio}} = 400 - 40 P_{\text{radio}} + 0.25(1,000) + 25(1) - 0.5(2)$$

$$QD_{\text{radio}} = 400 - 40 P_{\text{radio}} + 250 + 25 - 1$$

$$QD_{\text{radio}} = 674 - 40 P_{\text{radio}}$$

$$40 P_{\text{radio}} = 674 - QD_{\text{radio}}$$

Solving for price gives us the demand curve:

$$P_{\text{radio}} = 16.85 - 0.025 QD_{\text{radio}}$$

### Question #156 of 185

Question ID: 413584

Profit is maximized at the quantity of output for which marginal revenue equals marginal cost under:

- ✗ **A) perfect competition, but not under imperfect competition.**
- ✗ **B) imperfect competition, but not under perfect competition.**

- ✓ **C) both perfect competition and imperfect competition.**

Explanation

All firms, regardless of market structure, maximize profit at the output quantity for which marginal revenue equals marginal cost.

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**Question #157 of 185**

Question ID: 413489

Which of the following is the *most likely* effect of a subsidy in the market for corn?

- ✓ **A) The supply curve for corn will shift to the right.**
- ✗ **B) Marginal costs will be less than marginal benefit.**
- ✗ **C) The equilibrium quantity of corn will decrease.**

Explanation

A subsidy causes a shift rightward in the supply curve (increase in supply at a given price level) by the amount of the subsidy. The equilibrium quantity will increase and the price paid by buyers will decrease. Marginal cost will exceed marginal benefit and a deadweight loss will result from overproduction.

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**Question #158 of 185**

Question ID: 413453

With respect to a demand curve for a normal good, an increase in consumer incomes is *most likely* to cause:

- ✓ **A) an increase (shift to the right) in the demand curve.**
- ✗ **B) a greater equilibrium quantity but no shift in the demand curve.**
- ✗ **C) a decrease (shift to the left) in the demand curve.**

Explanation

An increase in incomes will increase quantity demanded at every price level, which we can represent as a shift of a demand curve to the right. We represent a change in price, holding other things equal, as movement along a demand curve.

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**Question #159 of 185**

Question ID: 413449

Other things equal, a decrease in the price of a good will:

- ✗ **A) decrease the quantity demanded.**
- ✗ **B) not affect the quantity demanded.**
- ✓ **C) increase the quantity demanded.**

Explanation

Other things equal, consumers demand a greater quantity of a good at a lower price than they demand at a higher price.

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### Question #160 of 185

Question ID: 413616

The law of diminishing returns states that at some point as:

- ☐ A) less of a resource are devoted to production, holding the quantity of other inputs constant, the output will decrease, but at an increasing rate.
- ☐ B) more of a resource is devoted to production, holding the quantity of other inputs constant, at some point output will begin to decrease.
- ☒ C) more of a resource is devoted to production, holding the quantity of other inputs constant, the output will increase, but at a decreasing rate.

#### Explanation

At low levels of output, increasing marginal returns will exist corresponding to the downward sloping portion of the marginal cost curve. As marginal costs begin to increase diminishing marginal returns will occur.

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### Question #161 of 185

Question ID: 413478

Producer surplus is *best* described as the:

- ☐ A) excess quantity supplied relative to quantity demanded.
- ☐ B) amount by which price exceeds the cash cost of production.
- ☒ C) excess of price over the opportunity cost of production.

#### Explanation

Producer surplus is defined as the excess of price over the opportunity cost, not the cash cost, of production. Excess quantity supplied relative to quantity demanded represents a surplus of the good in the market, but is not referred to as producer surplus.

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### Question #162 of 185

Question ID: 413603

Assume that output increased from 1,550 to 1,850 units per day as a result of increasing labor from 200 to 210 workers. The marginal product of labor is *closest* to:

- ☐ A) 1.25 units per day per worker.
- ☐ B) 1.55 units per day per worker.
- ☒ C) 30 units per day per worker.

#### Explanation

Marginal product is the additional output per additional unit of an input (labor). Since output changed by 300 units and labor changed by 10 workers, the marginal product is  $300 / 10 = 30$  units per day per worker.

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### Question #163 of 185

Question ID: 413444

An internal combustion engine is *best* described as a(n):

- ☐ A) finished good.
- ☒ B) intermediate good.
- ☐ C) factor of production.

Explanation

Engines are most likely to be considered intermediate goods because they are used in the production of such finished goods as motor vehicles. They are unlikely to be considered finished goods, even though consumers might occasionally purchase them, because their primary use is in the production of other goods that are driven by engines.

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**Question #164 of 185**

Question ID: 413548

Given a choice between consuming oranges and beans, a consumer's equilibrium bundle of goods is *most likely* to:

- ☐ A) have equal quantities of oranges and beans to maintain equilibrium.
- ☒ B) represent the most preferred affordable combination of oranges and beans.
- ☐ C) lie on the consumer's highest indifference curve.

Explanation

A consumer's equilibrium bundle of goods represents the highest indifference curve that is tangent to her budget line of affordable bundles. The consumer has higher indifference curves than this, but they consist of unaffordable bundles. The equilibrium bundle does not necessarily reflect equal quantities of the two goods.

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**Question #165 of 185**

Question ID: 413465

A price "bubble" is *most likely* to result from:

- ☐ A) increases in input prices that decrease supply.
- ☒ B) increases in price that increase expected future prices.
- ☐ C) a significant increase consumers' preference for a good.

Explanation

Price bubbles can result when price increases in the current period increase expected future prices, which causes further increases in current prices. At some point prices become unsustainably high, the bubble bursts, and price falls sharply.

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**Question #166 of 185**

Question ID: 413446

An internal combustion engine is *best* described as a(n):

- ☐ A) factor of production.
- ☒ B) intermediate good.
- ☐ C) finished good.

### Explanation

Engines are most likely to be considered intermediate goods because they are used in the production of such finished goods as motor vehicles. They are unlikely to be considered finished goods, even though consumers might occasionally purchase them, because their primary use is in the production of other goods that are driven by engines.

---

### Question #167 of 185

Question ID: 413560

Which of the following is an example of an implicit cost?

- ☒ A) Rent.
- ☒ B) The opportunity cost of a firm's equity capital.
- ☒ C) Labor salaries.

### Explanation

Implicit costs include the opportunity cost of a firm's equity. Explicit costs are measurable cash flows for operating expenses.

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### Question #168 of 185

Question ID: 413451

A supply function for leather shoes is *most likely* to include:

- ☒ A) Average income for all workers.
- ☒ B) Average hourly wage for leather workers.
- ☒ C) Price of plastic shoes.

### Explanation

A supply function will depend on the price of inputs to production of leather shoes, such as wages for leather workers. A demand function for leather shoes will likely depend on, among other factors, the price of plastic shoes (a substitute) and average income of all workers (who would be consumers of shoes).

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### Question #169 of 185

Question ID: 413523

For a linear demand curve, at the price where elasticity is -2.0, reducing prices will:

- ☒ A) increase total revenue and we are not at the point of maximum total revenue.
- ☒ B) decrease total revenue and we are not at the point of maximum total revenue.
- ☒ C) increase total revenue and we are at the point of maximum total revenue.

### Explanation

If the price elasticity of demand is -2.0, this indicates that the percentage change in quantity demanded is twice the percentage change in price. Thus, a decrease in price will be more than offset by the increase in quantity, and total revenue will increase. We are not at the point of maximum total revenue which is where elasticity is -1.0-the point of unit elastic demand.

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### Question #170 of 185

Question ID: 413568

A firm's factors of production *least likely* include:

- ✓ **A) finished goods.**
- ✗ **B) raw materials.**
- ✗ **C) manufactured inputs.**

#### Explanation

Factors of production are resources a firm uses to produce its output, including land, plant and equipment, labor, raw materials, and manufactured inputs (intermediate goods).

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### Question #171 of 185

Question ID: 413583

A firm operating under perfect competition will maximize profits by producing additional units until:

- ✓ **A) price equals marginal cost.**
- ✗ **B) marginal revenue exceeds marginal cost.**
- ✗ **C) total revenue is at its maximum.**

#### Explanation

Firms operating under any market structure maximize profits at the output quantity at which marginal revenue equals marginal cost. Marginal revenue equals price under perfect competition. This is not necessarily the quantity at which total revenue is maximized. If marginal revenue exceeds marginal cost, producing a greater quantity will increase profits.

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### Question #172 of 185

Question ID: 413470

The demand and supply functions for a good are as follows:

Quantity demanded =  $120 - 4 \times \text{price}$   
Quantity supplied =  $-90 + 6 \times \text{price}$

Given these functions, excess supply is equal to:

- ✗ **A) 30 at a price of 20.**
- ✗ **B) 60 at a price of 25.**
- ✓ **C) 90 at a price of 30.**

#### Explanation

To calculate excess supply or excess demand, substitute each given price into the supply and demand functions, then determine the difference between quantity supplied and quantity demanded.

Price = 20: QD =  $120 - 4(20) = 40$ ; QS =  $-90 + 6(20) = 30$ ; excess demand =  $40 - 30 = 10$ .

Price = 25: QD =  $120 - 4(25) = 20$ ; QS =  $-90 + 6(25) = 60$ ; excess supply =  $60 - 20 = 40$ .



Price = 30:  $QD = 120 - 4(30) = 0$ ;  $QS = -90 + 6(30) = 90$ ; excess supply =  $90 - 0 = 90$ .

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### Question #173 of 185

Question ID: 413600

If the last unit of input increases total product we know that the marginal product of that input is:

- ☐ A) falling.
- ☒ B) positive.
- ☐ C) increasing.

#### Explanation

As long as marginal product is positive, total product will increase. We would need more information to determine whether marginal product is falling or increasing.

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### Question #174 of 185

Question ID: 413540

Earl Hakkim is indifferent between consuming 10 DVDs and 5 books or consuming 8 DVDs and 6 books. The condition of non-satiation in utility theory predicts that:

- ☐ A) Hakkim would also be indifferent to consuming 6 DVDs and 7 books.
- ☐ B) books have twice as much utility for Hakkim as DVDs.
- ☒ C) Hakkim would prefer to consume 11 DVDs and 5 books.

#### Explanation

The condition of non-satiation refers to the assumption that consuming more is preferable to consuming less. This means Hakkim would prefer 11 DVDs and 5 books to 10 DVDs and 5 books. Because Hakkim is indifferent between 10 DVDs and 5 books or 8 DVDs and 6 books, and prefers 11 DVDs and 5 books to 10 DVDs and 5 books, we can assume he also prefers (gets more utility from) 11 DVDs and 5 books versus 8 DVDs and 6 books. Although the other statements may or may not be true, they do not reflect the condition of non-satiation.

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### Question #175 of 185

Question ID: 413555

A good is considered an inferior good if it exhibits a negative:

- ☐ A) substitution effect.
- ☒ B) income effect.
- ☐ C) elasticity of demand.

#### Explanation

The income effect is negative for an inferior good. An increase in income results in a decrease in the quantity demanded.

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## Question #176 of 185

Question ID: 413532

When household incomes go down and the quantity of a product demanded goes up, the product is:

- ☐ A) a necessity.
- ☒ B) an inferior good.
- ☐ C) a normal good.

### Explanation

When household incomes go down and the quantity demanded of a product goes up, the product is an inferior good. Inferior goods include things like bus travel and margarine.

## Question #177 of 185

Question ID: 413601

Which of the following *most* accurately describes the condition that typically exists when marginal product is at a maximum?

- ☐ A) Average variable cost is at a minimum.
- ☐ B) Average product is at a minimum.
- ☒ C) Marginal cost is at a minimum.

### Explanation

Marginal product is at a maximum when marginal cost is at a minimum. At the corresponding labor and output levels, average variable cost is decreasing and average product is increasing.

## Question #178 of 185

Question ID: 434233

The percent change in demand for a good divided by the percent change in the price of another good is known as the:

- ☐ A) income elasticity of demand.
- ☒ B) cross price elasticity of demand.
- ☐ C) price elasticity of demand.

### Explanation

Cross price elasticity of demand =  $\frac{\text{Percent change in quantity demanded}}{\text{Percent change in price of another good}}$

## Question #179 of 185

Question ID: 413610

A firm is trying to determine the optimal amount of labor to employ in its production process. Each unit of labor for this process costs the firm \$35. A partial table of the firm's short-run output estimates appears below:

Labor input, units	Marginal product	Total product	Marginal revenue	Marginal revenue product
4	8	22	\$10	\$80

5	7	29	\$9	\$63
6	6	35	\$9	\$54
7	4	39	\$8	\$32
8	2	41	\$8	\$16
9+	0	41	--	--

Which of the following is *least likely* to be accurate? This firm:

- ☒ A) will produce 35 units of the product.
- ☒ B) will employ the 7th unit of labor.
- ☒ C) experiences diminishing marginal returns from labor over the entire range shown.

#### Explanation

A profit maximizing firm will employ additional units of labor as long as the MRP of labor is greater than the cost of an additional unit of labor. At 7 units of labor input, MRP = \$32, which is less than the \$35 cost of one unit of labor. Therefore the firm will not employ the 7th unit of labor and will produce 35 units of output. Marginal product is decreasing as labor input increases, so the firm is experiencing diminishing marginal returns from labor.

### Question #180 of 185

Question ID: 413597

Which of the following *most* accurately describes the relationship between the slope of a firm's long-run average total cost (LRATC) curve and scale economies?

Downward sloping  
segment of LRATC

Upward sloping  
segment of LRATC

- ☒ A) Diseconomies of scale      Economies of scale
- ☒ B) Economies of scale      Economies of scale
- ☒ C) Economies of scale      Diseconomies of scale

#### Explanation

The downward sloping segment of the LRATC cost curve covers the output range where economies of scale exist because per unit costs decrease as output increases. The upward sloping segment of the LRATC curve is where diseconomies of scale are present because costs rise as output increases.

### Question #181 of 185

Question ID: 413471

The demand and supply curves for a good are as follows:

$$\text{Price} = -5 \times \text{quantity demanded} + 200$$

$$\text{Price} = 3 \times \text{quantity supplied} + 40$$

Which of the following statements about these curves is *most* accurate?

- ☐ A) The equilibrium quantity is 100.
- ☐ B) At a price of 70, excess supply is 16.
- ☒ C) At a price of 130, excess supply is 16.

#### Explanation

At the equilibrium price, quantity supplied equals quantity demanded:

$$3Q + 40 = -5Q + 200$$

$$8Q = 160$$

$Q = 20$ , which is the equilibrium quantity.

$$P = 3(20) + 40 = 100; \text{ or, } P = -5(20) + 200 = 100. \text{ The equilibrium price is 100.}$$

Because a price below 100 results in excess demand, we can rule out the answer choice "At a price of 70, excess supply is 16" and choose the correct answer with no further calculations.

At a price of 130:

$$130 = -5QD + 200$$

$$5QD = 70$$

$$QD = 14$$

$$130 = 3QS + 40$$

$$3QS = 90$$

$$QS = 30$$

$$\text{Excess supply at a price of 130} = QS - QD = 30 - 14 = 16.$$

At a price of 70:

$$70 = -5QD + 200$$

$$5QD = 130$$

$$QD = 26$$

$$70 = 3QS + 40$$

$$3QS = 30$$

$$QS = 10$$

$$\text{Excess demand at a price of 70} = QD - QS = 26 - 10 = 16.$$

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## Question #182 of 185

Question ID: 485761

A state enacts a \$4,000 per vehicle tax on each vehicle purchased in the state. Analysis shows that the supply curve is inelastic and the demand curve is elastic. If the state imposes the tax on the purchaser, the actual burden will be borne:

- ☐ A) primarily by the consumers.
- ☒ B) primarily by the producers.
- ☐ C) equally by consumers and producers.

#### Explanation

The actual burden of the tax depends on the relative elasticities of the supply and demand curves. With a demand curve that is more elastic than the supply curve, sellers (producers) bear more of the actual tax burden.

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### Question #183 of 185

Question ID: 413586

A firm that is experiencing diseconomies of scale should:

- ☐ A) shut down in the long run.
- ☒ B) decrease its plant size.
- ☐ C) decrease output in the short run.

#### Explanation

If a firm is experiencing diseconomies of scale, it should decrease its plant size to the efficient scale, which is the size that minimizes long-run average total cost. Plant size can be adjusted in the long run but not in the short run.

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### Question #184 of 185

Question ID: 413559

Hazel Green, CFA, earned \$90,000 last year working as a derivatives analyst. She is also a skilled web page designer. Green could earn \$70,000 per year in that occupation, which she has determined is her next-highest paying alternative. The difference between Green's income as a derivatives analyst and her potential income as a web page designer is *best* described as:

- ☒ A) economic rent.
- ☐ B) marginal revenue product.
- ☐ C) opportunity cost.

#### Explanation

Economic rent to a worker is the difference between what she earns and what she could earn in her next highest paying alternative employment. Her potential earnings in her next highest valued employment is her opportunity cost. Marginal revenue product (MRP) is the revenue from selling the output of one additional unit of an input. A high MRP makes it possible for a worker to earn economic rent.

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### Question #185 of 185

Question ID: 413452

If the price of a good increases, the market demand curve for the good:

- ☒ A) does not shift.
- ☐ B) decreases (shifts to the left).
- ☐ C) increases (shifts to the right).

#### Explanation

A price change causes movement along the demand curve to a different equilibrium quantity, but does not shift the demand curve.