Chapter 7 Practice Problems

1. Which of the following best illustrates the concept of consumer surplus?
	1. A thirsty athlete pays $0.85 for a cold drink when she would have gladly paid $1.50 for the drink.
	2. An individual who is willing to accept a job at $7.50 per hour is offered $7.00 per hour.
	3. An individual pays the sale price of $15.00 for the same shirt that the individual refused to purchase earlier at $18.00.
	4. An individual finds that the price of artichoke, a food she dislikes, has been reduced by 50 percent.
	5. A wood-carver has a marginal cost of $5.00 for a unit of output, but sells that unit at $6.00.
2. Which of the following is true of a price floor?
	1. The intention of the government in creating the price floor is to assist the producers of the good.
	2. To have an impact in the market for the good, the price floor should be set below the existing market price of the good.
	3. An effective price floor will increase the quantity demanded of the good.
	4. The price floor would tend to create a shortage of the good in the market.
	5. The creation of the price floor would not change the quantity supplied of the good if the supply curve were upward-sloping to the right.
3. Use the graph below to determine what price and quantity customers will pay given the government imposes a price ceiling of $8.



S

D

Price ceiling

 Quantity Price

* 1. 2 $2
	2. 2 $8
	3. 5 $5
	4. 5 $8
	5. 8 $8
1. Use the graph below to answer the following questions.

 Graph 1 Graph 2

 

* 1. If only 5 haircuts are made a day, how much consumer surplus will each client receive?
	2. In Graph 1, shade the region that represents the total consumer surplus. Then, calculate its value.
	3. If only 5 haircuts are made a day, how much producer surplus will the hairstylist receive?
	4. In Graph 1, shade the region that represents the total producer surplus. Then, calculate its value.
	5. The government decides to set a price floor so that hairstylists receive nothing less than $20 a haircut.
		1. Will this create a shortage or a surplus? How large will the shortage or surplus be?
		2. Assuming no black market forms, shade the regions of consumer surplus, producer surplus, and deadweight loss in the space provided in Graph 2.
		3. Calculate the value of the new consumer and producer surplus. Is each larger or smaller than its original value?
1. Use the following table to answer the questions below about the tent market. [calculate elasticity, sketch the d&s curves. Shifts dependent on inferior, normal, complement, or substitute goods, identify changes to cs, ps, and dwl, effects of an effective price ceiling]

|  |  |  |
| --- | --- | --- |
| Price | QD | QS |
| 20 | 10 | 10 |
| 40 | 6 | 50 |

* 1. Calculate the ED. Does the good have a perfectly elastic, relatively elastic, perfectly inelastic, relatively inelastic, or unit elastic demand?
	2. Calculate the ES. Does the good have a perfectly elastic, relatively elastic, perfectly inelastic, relatively inelastic, or unit elastic supply?
	3. Sketch a demand and supply graph.
		1. Label the equilibrium price and quantity given the information in the table.
		2. Shade the consumer surplus.
		3. Shade the producer surplus.
	4. The income elasticity of demand for tents is 3/2. Your income increases significantly.
		1. Sketch a new demand and supply graph and shade the new producer surplus.
		2. Has the producer surplus increased, decreased, remained the same, or is the change indeterminate?
	5. The government imposes an effective price ceiling. Sketch a new demand and supply graph showing the effective price ceiling.
		1. Identify whether the price ceiling results in a shortage or surplus.
		2. Shade the consumer surplus.
		3. Shade the producer surplus.
		4. Shade the area of deadweight loss.