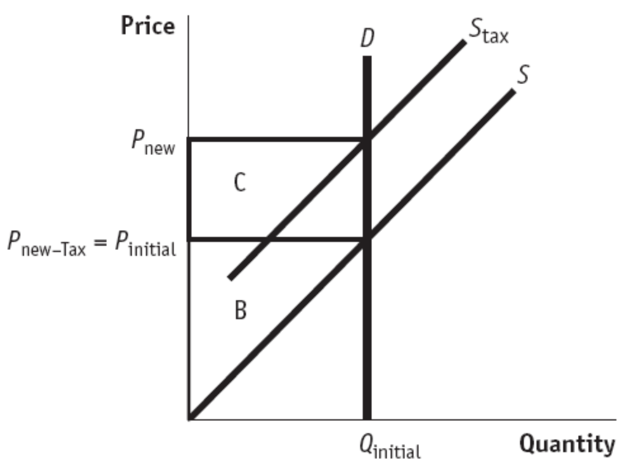
Economics 103 Fall 2011, Dr. Schuetze

Multiple Choice

1. If the demand curve for a good is perfectly price inelastic and the government imposes a tax in the market,
a. there will be no deadweight loss.
b. the government's tax revenue will equal the loss in producer surplus.
c. the government's tax revenue will be more than the loss in producer surplus.
d. the government's tax revenue will be less than the loss in producer surplus.

1. The figure below shows that as the government imposes a tax in a market where the demand curve is perfectly price inelastic, there will be no deadweight loss. Triangle B is the producer surplus both before and after the tax and rectangle C is the government's revenue from the tax. **Answer: A.**

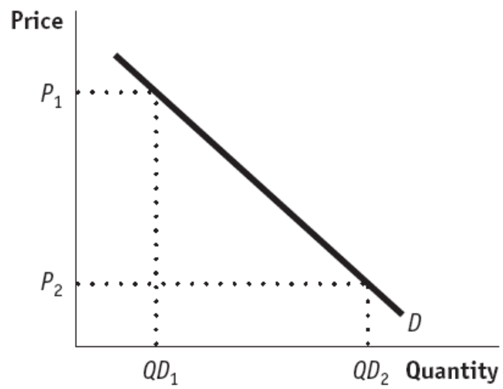


2. As soon as the price of a good goes up, suppliers would like to produce more but may not be able to because they cannot immediately hire more skilled laborers and/or purchase new machinery. However, over time firms can hire more workers and purchase more machinery. Consequently, the price elasticity of supply
a. decreases over time.
b. increases over time.
c. remains constant over time.
d. may increase or decrease over time.

2. As the firm has more time to change the number of workers and purchase or sell machinery, the more it will be able to change quantity supplied due to a given percent change in price. **Answer: B.**

3. Along the demand curve in the accompanying figure, the price elasticity of demand

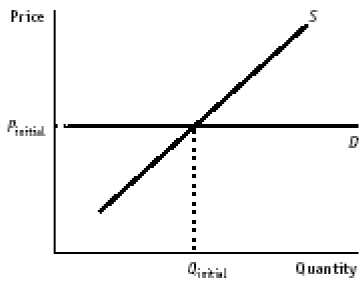
a. is constant and equal to its slope.
b. is larger at P_2 than at P_1.
c. is smaller at P_2 than at P_1.
d. is unit-elastic.



3. The demand curve shown is a linear demand curve. Linear demand curves have constant slopes but price elasticity varies along the curve. In particular, the price elasticity of demand is larger at higher prices than at lower prices. Since P_2 is a lower price than P_1, the price elasticity of demand must be smaller at P_2 than at P_1. **Answer: C.**

4. If the demand curve is perfectly price elastic,
a. consumer surplus will equal zero.
b. consumer surplus will equal producer surplus.
c. consumer surplus will equal total surplus.
d. consumer surplus will be greater than producer surplus.

4. If the demand curve is perfectly price elastic, consumers are only willing to buy units of the good at one particular price. That price must be the market price. Since there is no difference between the price consumers are willing to pay and the market price, there is no area below the demand curve and above the market price and consumer surplus is zero. The figure below shows the answer graphically. **Answer: A.**



5. A higher minimum wage will increase total income of the unskilled labour if the

demand for unskilled labour is
a. elastic.
b. inelastic.
c. unit-elastic.
d. perfectly elastic.

5. Since both wage rate as well as labour income increased, it is a case of inelastic demand. **Answer: B.**

Problem

The province needs to raise money, and the premier has a choice of imposing an excise tax of the same amount on one of two previously untaxed goods: the province can either tax sales of restaurant meals or sales of gasoline. Both the demand for and the supply of restaurant meals are more elastic than the demand for and the supply of gasoline. If the premier wants to minimize the deadweight loss caused by the tax, which good should be taxed? For each good, draw a diagram that illustrates the deadweight loss from taxation.

1. The tax should be imposed on sales of gasoline. Since both demand for and supply of gasoline are less elastic, changes in the price of gasoline will result in smaller reductions in the quantity demanded and the quantity supplied. As a result, fewer transactions are discouraged by the tax—in other words, less total surplus (consumer and producer surplus) is lost. Panel (a) of the accompanying diagram illustrates a tax imposed on sales of gasoline, for which both demand and supply are less elastic; panel (b) illustrates a tax imposed on sales of restaurant meals, for which both demand and supply are more elastic. As you can see, deadweight loss—the shaded triangle—is larger in panel (b) than in panel (a).