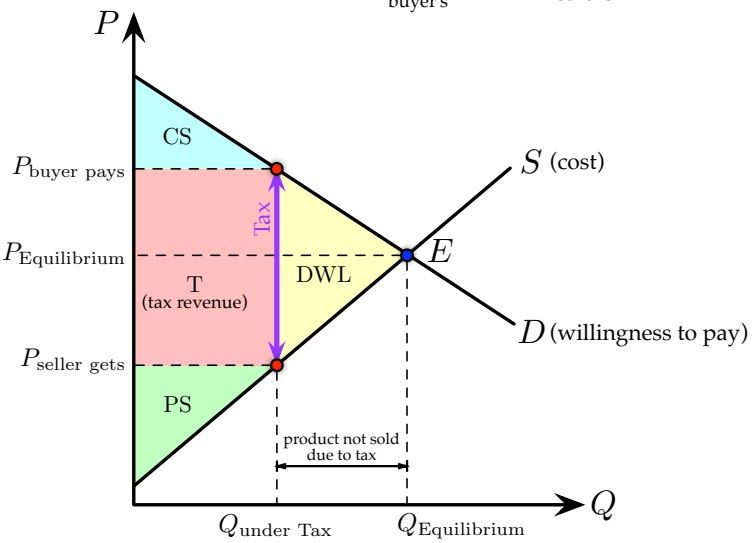
Handout 5

1 Reminder

- Any comments please use the *Feedback Survey* (on my website, haochehsu.com, under *Teaching*)
- Homework Ch8: due next Monday (5/29) at 11:00 am.

2 Key Concepts

- Consumer surplus (CS) = willingness to pay − price (P)
- Producer surplus (PS) = price (P) − Cost (C)
- TS (Total surplus) = CS + PS + T (Tax) = $\underbrace{\text{willingness to pay}}_{\text{buyer's}} - \underbrace{\text{cost}}_{\text{seller's}}$ − DWL (deadweight loss)



3 Exercises

1. A simultaneous increase in both the demand for tablets and the supply of tablets would imply that
   (a) both the value of tablets to consumers and the cost of producing tablets has increased.
   (b) the value of tablets to consumers has decreased, and the cost of producing tablets has increased.
   (c) both the value of tablets to consumers and the cost of producing tablets has decreased.
   (d) the value of tablets to consumers has increased, and the cost of producing tablets has decreased.

2. Welfare economics implies that the equilibrium price of a product is considered to be the best price because it
   (a) is not socially desirable.
   (b) minimizes costs and maximizes output.
   (c) maximizes the combined welfare of buyers and sellers.
   (d) minimizes the level of welfare payments.

3. Optimal weather conditions in *Orange County* lead to a plentiful orange harvest, consequently driving down the prices of oranges and orange juice. As a result, the consumer surplus in the market for oranges

   (a) decreases, and the consumer surplus in the market for red wine decreases.

   (b) decreases, and the consumer surplus in the market for red wine increases.

   (c) increases, and the consumer surplus in the market for red wine decreases.

   (d) increases, and the consumer surplus in the market for orange juice increases.

4. If a tax shifts the demand curve upward,

   (a) we can infer that the tax was levied on both buyers and sellers of the good.

   (b) we can infer that the tax was levied on buyers of the good.

   (c) we can infer that the tax was levied on sellers of the good.

   (d) we cannot infer anything because the shift described is not consistent with a tax.

5. James purchases a ring for $1,900 and his consumer surplus is $100. How much is James willing to pay for the ring?

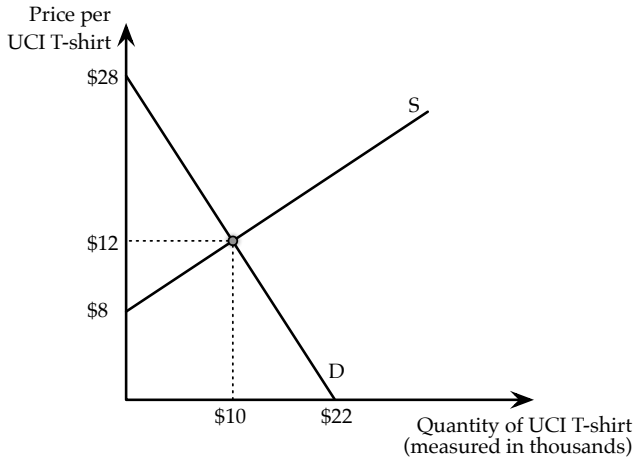
   (a) 1,900

   (b) 1,800

   (c) 2,000

   (d) 100

6. The market for UCI T-shirts is in equilibrium at 10,000 per year, at a price of $12 per T-shirt.



   Given this information, the value of consumer surplus is _____ and the value of producer surplus is _____. (b)

   (a) $50,000; $50,000

   (b) $80,000; $20,000

   (c) $140,000; $120,000

   (d) $160,000: $40,000

7. If a consumer places a value of $13 on a particular good and if the price of the good is $16, then the
   (a) market is not a competitive market.
   (b) consumer enjoys consumer surplus if he or she buys the good.
   (c) price of the good will fall due to market forces.
   (d) consumer does not purchase the good.

8. The size of a tax and the deadweight loss that results from the tax are
   (a) independent of each other.
   (b) negatively related.
   (c) positively related.
   (d) equal to each other.

9. A tax of $0.25 is imposed on each bag of potato chips that is sold. The tax decreases producer surplus by $600 per day, generates tax revenue of $1,220 per day, and decreases the equilibrium quantity of potato chips by 120 bags per day. The tax
   (a) decreases consumer surplus by $645 per day.
   (b) decreases the equilibrium quantity from 6,000 bags per day to 5,880 bags per day.
   (c) decreases total surplus from $3,000 to $1,800 per day.
   (d) creates a deadweight loss of $15 per day.

10. In Mike's Bakery, each croissant costs $1.5 to make. If Mike sells 20 of these croissants and achieves a producer surplus of $40, then the selling price of each croissant must be
    (a) $3.5 each.
    (b) $2 each.
    (c) $3 each.
    (d) $1.5 each.

11. When a country is on the downward-sloping side of the Laffer curves, a cut in the tax rate will
    (a) decrease tax revenue and decrease the deadweight loss.
    (b) decrease tax revenue and increase the deadweight loss.
    (c) increase tax revenue and decrease the deadweight loss.
    (d) increase tax revenue and increase the deadweight loss.

12. Which of the following quantities decrease in response to a tax on a good?
    (a) The equilibrium quantity in the market for the good, the effective price of the good paid by buyers, and consumer surplus.
    (b) The equilibrium quantity in the market for the good, producer surplus, and the well-being of buyers of the good.
    (c) The effective price received by sellers of the good, the wedge between the effective price paid by buyers and the effective price received by sellers, and consumer surplus.
    (d) It depends on whether the tax is levied on buyers or on sellers.