

Chapter 6 Q and A

1. Consider a market with demand function, $Q_d = 22 - 2P$ and supply function, $Q_s = 2 + 3P$. Assume the market price is 3. Is there a surplus or shortage of the good at this price?

Answer: A **shortage of 5** since $Q_d = 22 - 2(3) = 16$ and $Q_s = 2 + 3(3) = 11$.

2. A price ceiling is set above the equilibrium price. This will result in a
shortage of goods. surplus of goods. **Neither.**

3. If an *effective* price ceiling is implemented in a market what is likely to happen to the opportunity cost of *finding* the good?

- A) The opportunity cost will fall.
- B) The opportunity cost will rise.**
- C) The opportunity cost is not affected by a price ceiling
- D) The opportunity cost is higher if the good is inferior.

4. Which of the following is an example of a price ceiling?

- A) Rent controlled apartments**
- B) Minimum wage
- C) Agricultural price supports
- D) Purchasing a combo meal at McDonalds.

5. If the Federal minimum wage was raised to \$15.00/hr. What impact would this have on low-skill employment?

- A) Many low skill workers will lose their jobs.**
- B) The increase will have virtually no impact on employment.
- C) The employment prospects for low skill workers will expand slightly.
- D) The employment prospects for low skill workers will expand significantly.

6. Which of the following is an example of a price control that creates a surplus?

- A) price gouging
- B) rent control
- C) minimum wage**

7. Marfa, TX decides to raise the minimum wage in the town from \$7.25/hour to \$9.00/hour. If the current market equilibrium wage in for low skill jobs is \$10.00/hour in Marfa, what impact will the new minimum wage have?

- A) This will create a surplus of low skill workers.
- B) This will create a shortage of low skill workers.
- C) Since the new minimum wage is below the current market equilibrium wage, this will have no impact on the wages of low skill workers.

8. If a new binding price ceiling is passed, what impact will this have on the amount of discrimination in society?

- A) discrimination will increase
- B) discrimination will decrease
- C) discrimination against consumers will remain the same
- D) discrimination will no longer be possible.

9. What impact will a new binding price ceiling have on the quality of the good?

- A) the quality of the good will increase
- B) the quality of the good will fall
- C) quality will remain the same

10. If Texas decides to raise the minimum wage to \$10.50/hour. If the market equilibrium wage for low skill jobs around Abilene is \$9.00/hour, what impact will the new minimum wage have?

- A) This will create a surplus of low skill workers (unemployment will increase).
- B) This will create a shortage of low skill workers (unemployment will decline).

11. Which of these is an example of price gouging?

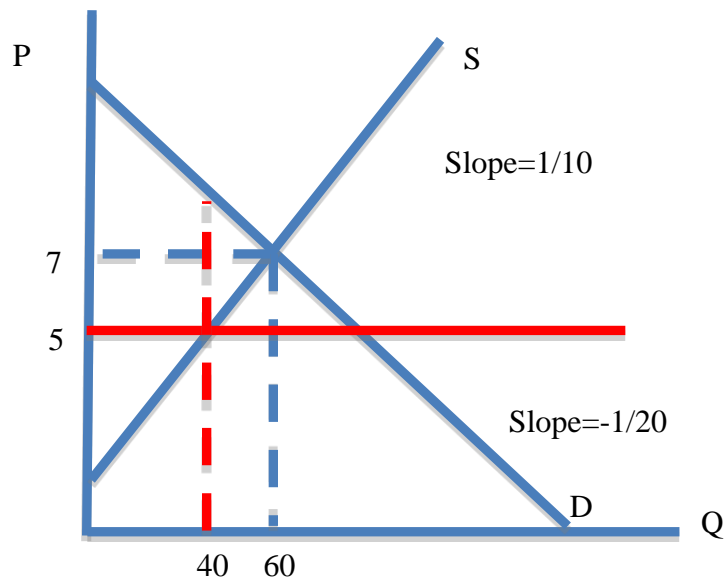
- A) Paying \$20 to park at a concert.
- B) Paying \$5000 a month for insulin.
- C) Paying \$10 for a large popcorn at the movies
- D) Paying \$1000 for a small power generator after a disaster.

12. Suppose that the supply curve for wheat is given by $Q_S = 10P - 10$ and suppose that the demand curve for wheat is given by $Q_D = 200 - 20P$.

- a. Find the equilibrium price and quantity of wheat.

Answer: $Q_S = Q_D \Rightarrow 10P - 10 = 200 - 20P \Rightarrow 30P = 210 \Rightarrow P^* = 7$ and $Q^* = 60$.

b. Sketch a picture of the supply curve and the demand curve. Be sure to label i) both axes, ii) the y-intercept both curves, iii) the slope of both curves, and iv) the equilibrium price and quantity.



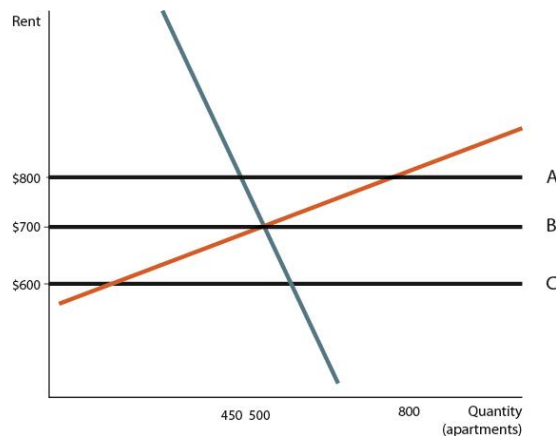
c. Concerned about rising food prices, suppose that the government introduces a price ceiling of \$5. What will be the new equilibrium quantity of wheat bought and sold on the market?

Answer: $Q^*=40$

d. Is this new quantity economically efficient? Explain.

Answer: No. We know the efficient quantity is 60.

13. The graph below shows the supply and demand for apartments in a large town near a university.



In the graph, which price represents a binding price ceiling in the market for apartments?

Answer: A price ceiling is a legally established maximum price for goods and services. If the government thinks \$700 for an apartment is too high, then it might pass a law that requires landlords to charge a maximum amount below the equilibrium price—for example, a maximum rent of \$600. C is correct.

14. The table below gives demand and supply information for portable home generators in New Orleans. As you would expect, the demand for portable home generators is higher during a hurricane than during normal times.

Price	Quantity supplied	Normal times quantity demanded	Hurricane quantity demanded
\$1,500	100	10	40
\$1,200	80	20	80
\$900	60	30	120
\$600	40	40	160
\$300	20	50	200
\$0	0	60	240

Suppose the New Orleans city council passes a price gouging law: during a hurricane, the price of a generator cannot increase by more than 50% above the *normal* market equilibrium price. During a hurricane there would be a shortage of _____ generators.

Answer: Start by finding the equilibrium price during normal times. Add 50% to that, which gives the price ceiling. Now get the shortage. During normal times, the equilibrium price is \$600, and the equilibrium quantity is 40 generators. The price gouging law establishes a price ceiling of 50% more than \$600, which is \$900 ($\$600 \times .5 = \300 , so $\$600 + \$300 = \$900$). At a price of \$900, 120 generators are demanded, but only 60 generators are supplied. Therefore, there is a shortage of $120 - 60 = 60$ generators.

15. You are looking for a low skill job in Tucson. The state minimum wage is \$12/hour, the federal minimum wage is \$7.25/hour & the market equilibrium wage is \$13/hour.

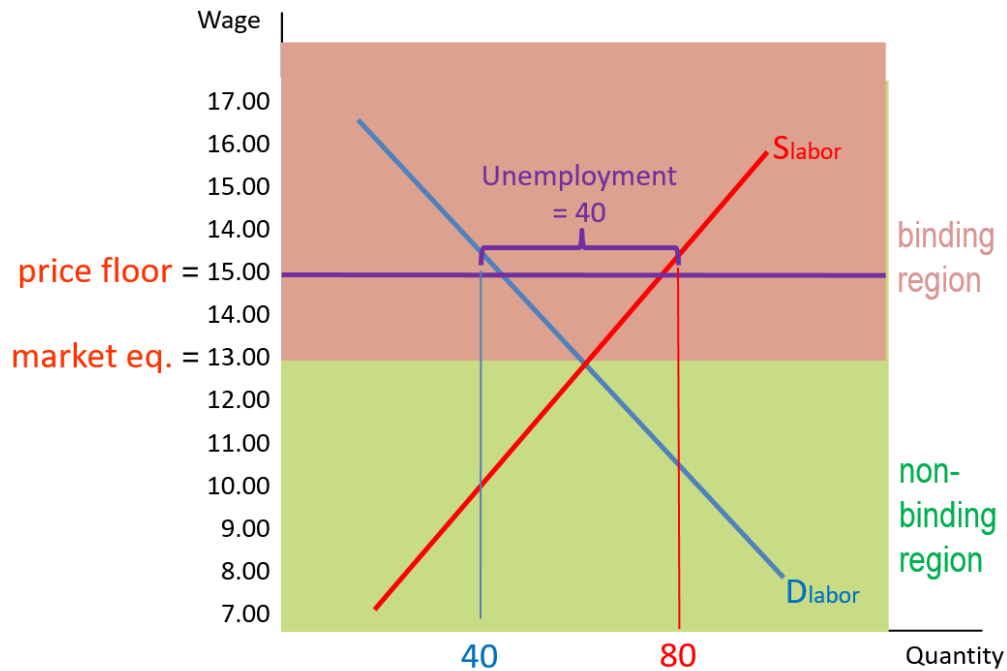
A) What wage will you be paid?

Answer: \$13/hour

B) Are the state & national wages binding or non-binding price floors?

Answer: The state and national mw are non-binding.

C) Now suppose AZ increases the minimum wage from \$12/hour to \$15/hour, which is above the equilibrium market wage. Graph this result using the following data: At \$12/hour 60 people are employed. At \$15/hour, labor demand is 40; labor supply is 80. How many people are unemployed?



16. When the minimum wage is increased it causes

- A) more employment.
- B) firms to use more low-skilled workers.
- C) firms to relocate to areas with higher minimum wages.
- D) employees to work fewer hours.
- E) employees to receive better health care benefits.

17. What form of illegal activity will take place in response to a shortage of milk caused by price controls?

- A) Illegal markets will develop to provide consumers with what they want
- B) consumers will wait in line to obtain milk
- C) producers will create fancier milk offerings, such as fruit-flavored varieties, in order to incentivize consumers to remain loyal customers.
- D) the government will create its own market to sell milk to consumers who cannot obtain it.

18. A price floor is set below the equilibrium price. This will result in a

- A) shortage of the good.
- B) a surplus of the good.
- C) neither a shortage nor surplus of the good.
- D) a shortage when demand is low.
- E) a surplus when supply is low.

19. During COVID-19, price gouging legislation made increasing the price of an essential item by more than a small amount unlawful. What unintended consequence did this cause?

- A) Illegal market resellers faced stiff penalties.
- B) People were able to get essential items without having to pay more.
- C) Stores stocked more of the item than people needed.
- D) The government supplied essential items (masks, sanitary wipes, disinfectant, etc.) to anyone that needed them.
- E) Shortages of the item were exacerbated.

20. Compare City A and City B. Suppose that even though the elasticity of demand for housing is the same in both cities, the elasticity of supply for housing is more inelastic in City A than in City B. If a rent ceiling is imposed in both cities, in what city will the resulting deadweight loss be the greatest? Assume that the initial equilibrium rent is the same in both cities and that the rent ceiling is effective in the sense that it is set below the initial equilibrium rent. Give an illustration of this situation along with your explanation.

If the supply of housing is more inelastic in City A than in City B, then the deadweight loss of the tax will be smaller in City A than in City B. Intuitively, this occurs because if the supply for housing is inelastic, then the imposition of a rent ceiling will have little effect on the equilibrium quantity of housing.

