

Student: _____

Instructor: Ufuk Tutan

Date: _____

Course: BUS211 - ECON101 (Fall 2019)

Assignment: mid-term

1. **Problem statement:** → The table below provides information about the number of cups of lemonade that Caroline and Emily can sell each day at various prices. The data points are plotted on the graph, with the number of cups of lemonade on the X-Axis and the price on the Y-Axis.

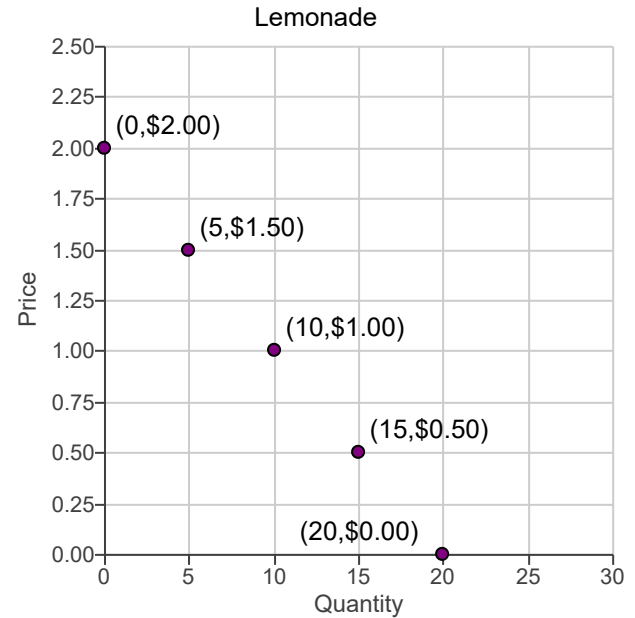
Cups of lemonade sold per day	Price
0	\$2.00
5	\$1.50
10	\$1.00
15	\$0.50
20	\$0

You can connect the points with a straight line using the Line Drawing Tool. To access the tool palette used to draw your answer to the question, click anywhere inside of the graph. Click once on the beginning coordinate to start the line, then move the mouse to ending coordinate, and click again to finish.

Instruction: → Use the line drawing tool to draw a single line representing the demand schedule above, beginning at the price of \$2.00 and ending at the price of \$0. Properly label this line.

Note: since the demand schedule can be represented by a straight line, you only need to plot the beginning and ending points of the line.

Carefully follow the instructions above, and only draw the required objects.



2. Sometimes questions that involve graphs will ask you to consider the effect of a changing factor or factors.

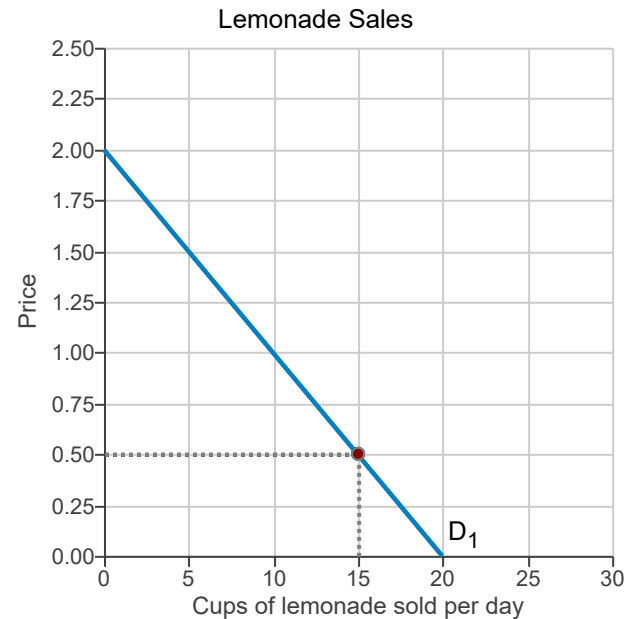
Problem statement: → The line labeled D_1 in the graph to the right shows the number of cups of lemonade that Caroline and Emily can sell at their lemonade stand at various prices. Caroline and Emily have noticed that they sell more lemonade when it's hotter.

Click anywhere on the graph to open a window with a control labeled Temperature. If you use the slider to change the temperature, the line will shift. Change the temperature from 80 degrees to 90 degrees.

Question: → At a price of \$0.50, how many more or fewer cups of lemonade do Caroline and Emily sell when the temperature is 90 degrees than when the temperature is 80 degrees?

(Note: indicate the change in cups of lemonade sold: fewer will be a negative number and more will be a positive number)

- ☐ A. -2
- ☐ B. 5
- ☐ C. 15
- ☐ D. 0



3. Sometimes questions that involve graphs will ask you to consider the effect of a changing factor or factors.

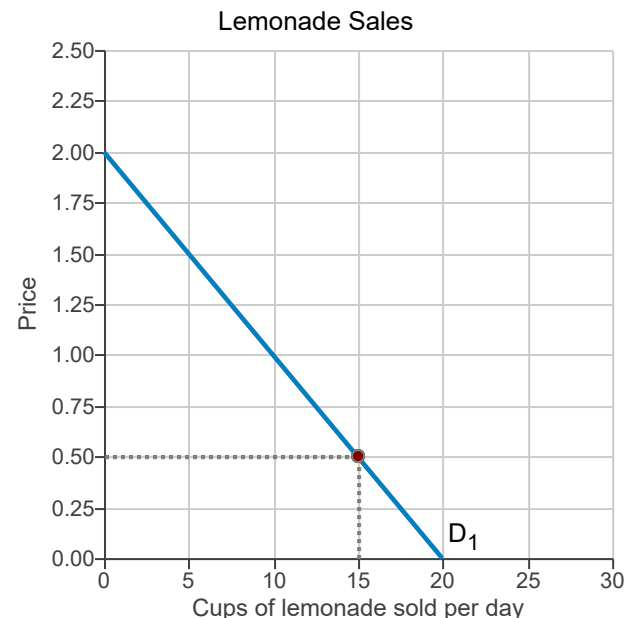
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- ☐ D. 15



4. Which of the following news headlines does *not* deal with scarcity?

- ☐ A. Globalization's Winners and Losers
 - ☐ B. Netflix added 7.05 million subscribers in the last quarter
 - ☐ C. Hershey plans 2,700 job cuts
 - ☐ D. The cost of going green
-

5. Think about the following news items. Which items involve a microeconomic issue and which involve a macroeconomic issue?

A. Is Hulu Plus a better value for your money than Netflix?

B. 7 ways streaming music will change in 2017

C. U.S. inflation expectations at highest level since 2015

D. More police, managed more effectively, really can reduce crime

Statement A involves a _____ issue.

Statement B involves a _____ issue.

- ☐ A. micro; macro
- ☐ B. macro; macro
- ☐ C. micro; micro
- ☐ D. macro; micro

Statement C involves a _____ issue.

Statement D involves a _____ issue.

- ☐ A. micro; macro
 - ☐ B. macro; macro
 - ☐ C. micro; micro
 - ☐ D. macro; micro
-

6. _____ are examples of **goods** and _____ are examples of **services**.

- ☐ A. Haircuts; shoes
- ☐ B. Weather forecasts; interest rates
- ☐ C. Shoes; haircuts
- ☐ D. Donations to flood victims; football games

The resources that are used to produce goods and services - _____ are **factors of production**.

- ☐ A. physical and financial capital
- ☐ B. labor and capital
- ☐ C. land, labor, capital, and entrepreneurship
- ☐ D. land, labor, stocks and bonds

Land is the _____ that we use to produce goods and services.

- ☐ A. tool
- ☐ B. good
- ☐ C. financial capital
- ☐ D. gifts of nature or natural resources

The _____ that people devote to produce goods and services is **labor**.

- ☐ A. time and money
- ☐ B. money and consumption goods and services
- ☐ C. time
- ☐ D. work time, and work effort

Human capital _____ that people obtain from education, on-the-job training, and work experience.

_____ that have been produced in the past and that businesses now use to produce goods and services is **capital**.

- ☐ A. are goods and services;
Inputs
- ☐ B. is the knowledge and skill;
Tools, instruments, machines, buildings, and other items
- ☐ C. are productive resources;
Inputs and outputs
- ☐ D. are inputs;
Natural resources and other goods

Which of the following is an example of **entrepreneurship**?

- ☐ A. Industrial output in China is increasing.
- ☐ B. Facebook is a social networking site.
- ☐ C. Sam Walton created the multinational retail corporation brand Walmart in 1962.
- ☐ D. Honda Civic and Toyota Corolla are the best-selling compact cars in North America.

Rent is the income paid for the use of _____.

Wages are income paid for the services of _____.

Profit (or loss) is the _____ earned by an entrepreneur for running a business.

Interest is the income paid for the use of _____.

- ☐ A. labor;
land;
capital;
capital
- ☐ B. labor;
land;
income;
capital
- ☐ C. land;
labor;
income;
capital
- ☐ D. goods and services;
capital;
rent;
loans

_____, is an example of a choice in the **self-interest**.

_____, is an example of a choice in the **social interest**.

- ☐ A. I go home on Thanksgiving;
I would like to buy a new cellphone
- ☐ B. I buy pizza for lunch;
I am collecting funds to help the flood victims
- ☐ C. It is too cold in North Dakota;
Louisiana suffered from Hurricane Katrina
- ☐ D. Texas has a very high per capita GDP;
We cancelled our trip to India because of the devastating floods

Which of the following illustrates an **efficient** outcome?

- ☐ A. Ted pays \$10,000 for a new meat slicer that operates at double the speed of his old one.
 - ☐ B. Ted pays his workers a higher wage and his profit takes a dive.
 - ☐ C. Ted cuts the price of his sausages and his profit decreases.
 - ☐ D. Ted cuts the price of his sausages and his profit increases.
-

7. Every week, Bob skates for one hour, and his grade on each English test is 95 percent.

Last week, after skating for one hour, Bob considered skating for another hour.

He decided to skate for another hour and cut his study time by one hour.

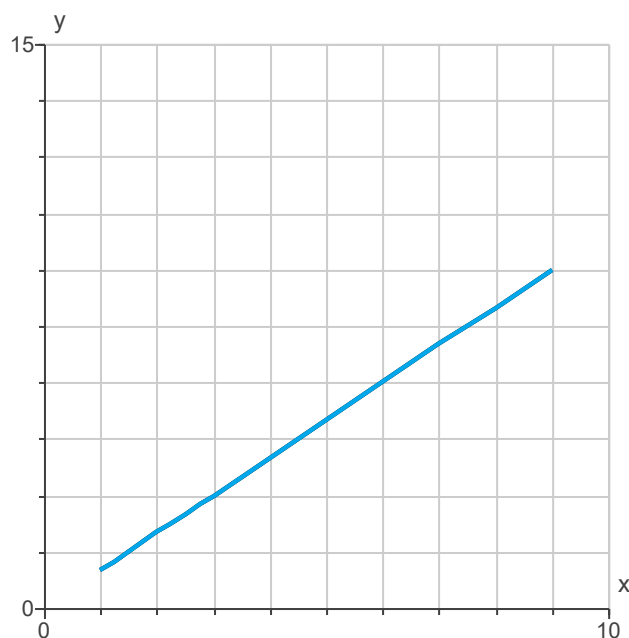
But last week, his English grade fell to 90 percent.

Given that Bob spent a second hour skating, what can you conclude about the marginal benefit and marginal cost of the first hour of skating?

- ☐ A. The marginal cost of dropping 5 percentage points on an English test exceeded the marginal benefit from a second hour of skating.
- ☐ B. The marginal benefit from the first hour of skating exceeded its marginal cost.
- ☐ C. The marginal benefit from the first hour of skating exceeded the marginal cost of dropping 5 percentage points on an English test.
- ☐ D. The marginal cost of the first hour of skating exceeded its marginal benefit.

8. The graph shows _____.

- ☐ A. a negative linear relationship
- ☐ B. a positive linear relationship
- ☐ C. a negative relationship becoming steeper
- ☐ D. a negative relationship becoming less steep



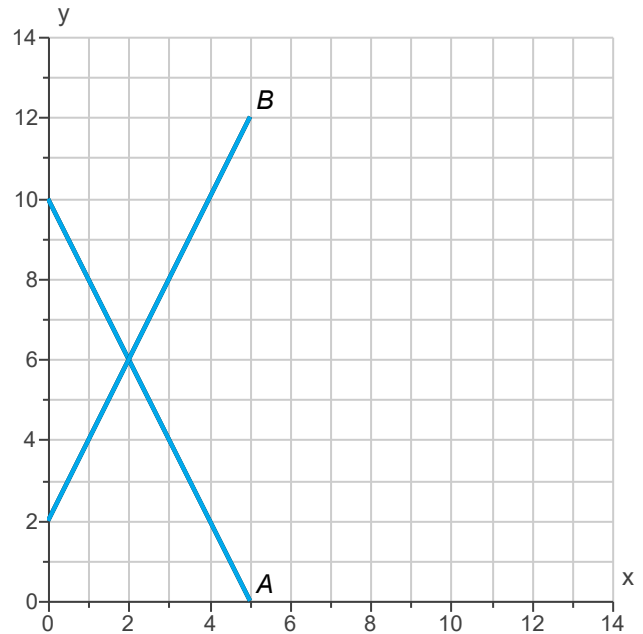
9. The graph shows two relationships.

Line A has _____ slope and the slope equals _____.

- ☐ A. a positive; 2.00
- ☐ B. a negative; -2.00
- ☐ C. a decreasing; at most -2.00
- ☐ D. an increasing; at least 2.00

Line B has _____ slope and the slope equals _____.

- ☐ A. a decreasing; at most -2.00
- ☐ B. an increasing; at least 2.00
- ☐ C. a positive; 2.00
- ☐ D. a negative; -2.00

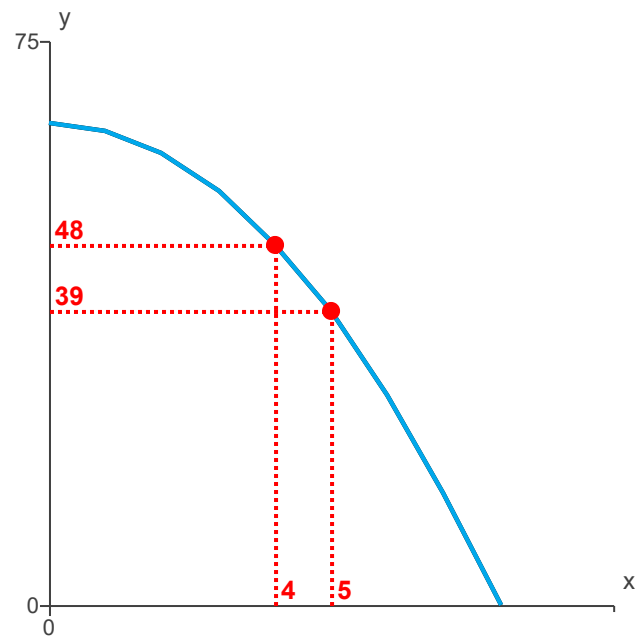


10. The graph shows a relationship between two variables, x and y .

When x increases from 4 to 5, what is the slope of the relationship across the arc?

When x increases from 4 to 5, the slope of the relationship across the arc is _____.

>>> If the slope is negative, use a minus sign. If the slope is positive, do not use a plus sign.

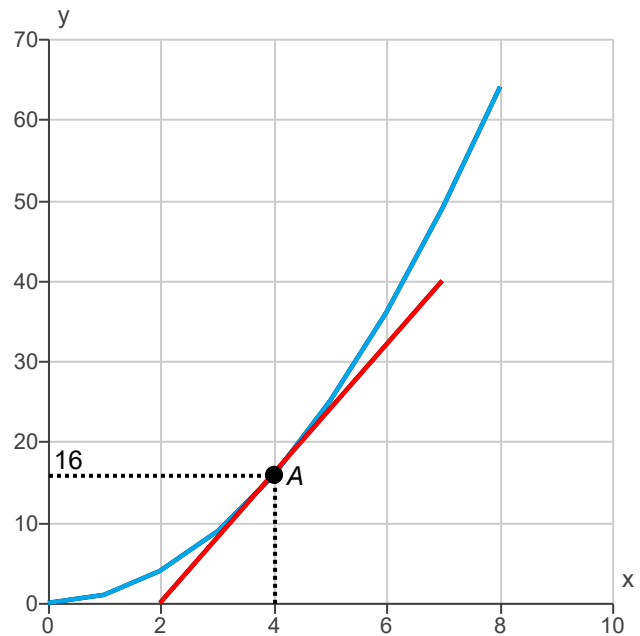


11. The blue curve in the graph shows the relationship between two variables, x and y .

What is the slope of the relationship between x and y when x equals 4?

When x equals 4, the slope of the relationship is _____.

>>> If your answer is negative, include a minus sign. If your answer is positive, do not include a plus sign.



12. ¹ Click on the icon to read the news clip, then complete the following steps.

Draw the *PPF* for video entertainment and other goods and services *before* the arrival of inexpensive broadband. Label it PPF_1 .

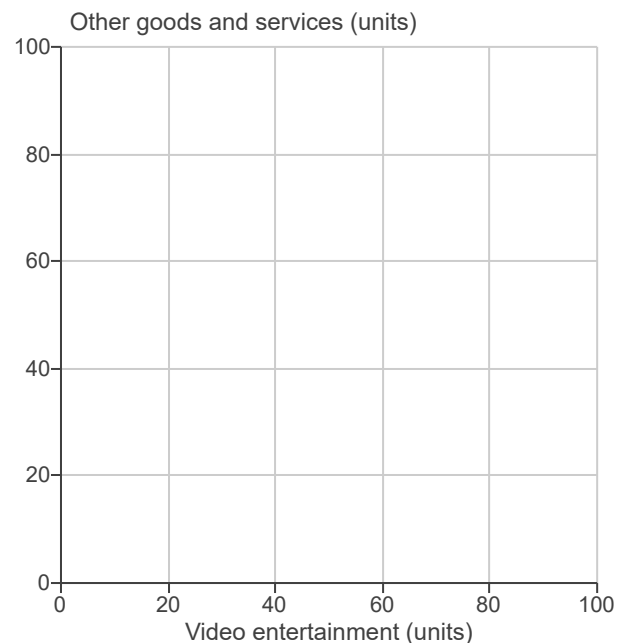
Draw the *PPF* *after* the arrival of inexpensive broadband. Label it PPF_2 .

With the arrival of inexpensive broadband, the marginal benefit from video entertainment _____ and the marginal cost of video entertainment _____.

- ☐ A. decreases; does not change
☐ B. increases; increases
☐ C. decreases; increases
☐ D. increases; decreases

With the arrival of inexpensive broadband, the quantity of video entertainment that achieves allocative efficiency

(1) _____.



>>> Draw only the objects specified in the question.

1: News clip

Lots of Little Screens

Inexpensive broadband access has created a generation of television producers for whom the Internet is their native medium. As they redirect the focus from TV to computers, cell phones, and iPods, the video market is developing into an open digital network.

Source: *The New York Times*, December 2, 2007

- (1) ☐ increases
☐ decreases

13. Think of examples of goods whose relative price has risen or fallen by a large amount.

In 2007, the price of a gallon of gas was \$2.59. In 2017, the price of a gallon of gas was \$2.32

In 2007, the price of a dozen eggs was \$1.63. In 2017, the price of a dozen eggs was \$1.40.

Between 2007 and 2017, the relative price of a gallon of gas with respect to a dozen eggs _____ and the relative price of a dozen eggs with respect to a gallon of gas _____.

- ☐ A. rose; rose
- ☐ B. fell; fell
- ☐ C. fell; rose
- ☐ D. rose; fell

14. A **competitive market** is a market that has _____, so _____ can influence the price.

- ☐ A. many buyers and sellers; no single buyer or seller
- ☐ B. many buyers and sellers; both buyers and sellers
- ☐ C. many buyers and one seller; no buyer
- ☐ D. one buyer and many sellers; no seller

15. The demand curve is $P = 100 - 2Q_D$. The supply curve is $P = 50 + 5Q_S$.

At market equilibrium, the equilibrium quantity is _____ and the equilibrium price is _____.

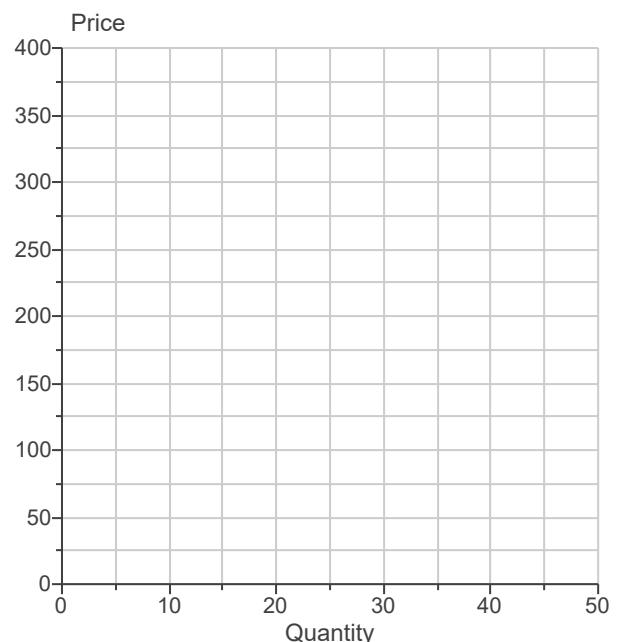
- ☐ A. 7.1; 85.71
- ☐ B. 85.71; 7.1
- ☐ C. 0.14; 5
- ☐ D. 5; 0.14

16. The y-axis intercept of the demand curve is 350 and the slope is -5 .

Draw and label this demand curve. Make your demand curve intersect the y-axis.

The equation of the demand curve that you have drawn is _____.

- ☐ A. $P = 350 - 5Q_D$
- ☐ B. $P = 5 - 350Q_D$
- ☐ C. $P = 350 + 5Q_D$
- ☐ D. $Q_D = 350 - 5P$



>>> Draw only the objects specified in the question.

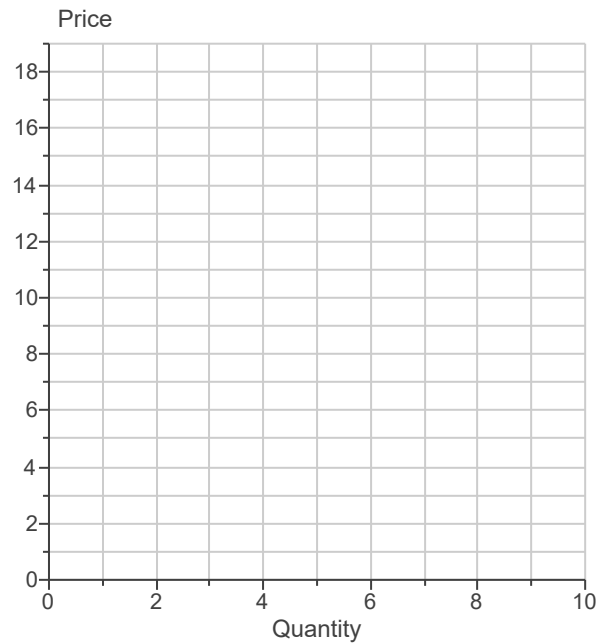
17. The y -axis intercept of the supply curve is 6 and the slope is 2.

Draw and label this supply curve.

>>> Make your supply curve intersect the y -axis.

The equation of the supply curve that you have drawn is _____.

- ☐ A. $P = 2 + 6Q_S$
- ☐ B. $P = 6 + 2Q_S$
- ☐ C. $P = 6 - 2Q_S$
- ☐ D. $Q_S = 6 + 2P$



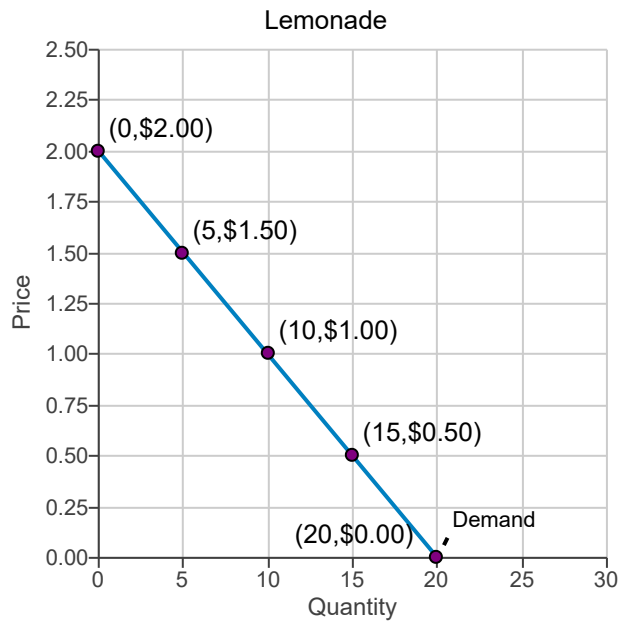
>>> Draw only the objects specified in the question.

18. The demand curve is $P = 800 - 3Q_D$. The supply curve is $P = 50 + 25Q_S$.

At market equilibrium, the equilibrium quantity is _____.

- ☐ A. 26.8
- ☐ B. 0.04
- ☐ C. 719.64
- ☐ D. 25

1.



2. B. 5

3. C. 5

4. B. Netflix added 7.05 million subscribers in the last quarter

5. C. micro; micro

D. macro; micro

6. C. Shoes; haircuts

C. land, labor, capital, and entrepreneurship

D. gifts of nature or natural resources

D. work time, and work effort

B. is the knowledge and skill; Tools, instruments, machines, buildings, and other items

C. Sam Walton created the multinational retail corporation brand Walmart in 1962.

C. land; labor; income; capital

B. I buy pizza for lunch; I am collecting funds to help the flood victims

D. Ted cuts the price of his sausages and his profit increases.

7. B. The marginal benefit from the first hour of skating exceeded its marginal cost.

8. B. a positive linear relationship

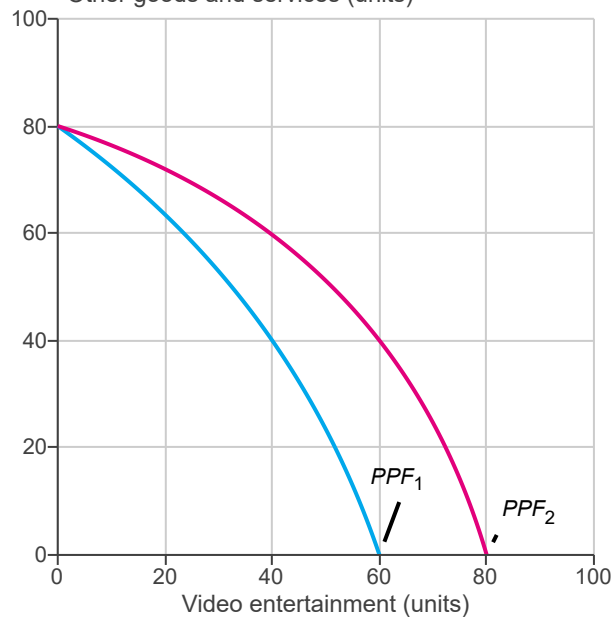
9. B. a negative; -2.00

C. a positive; 2.00

10. -9

11. 8

12. Other goods and services (units)



D. increases; decreases

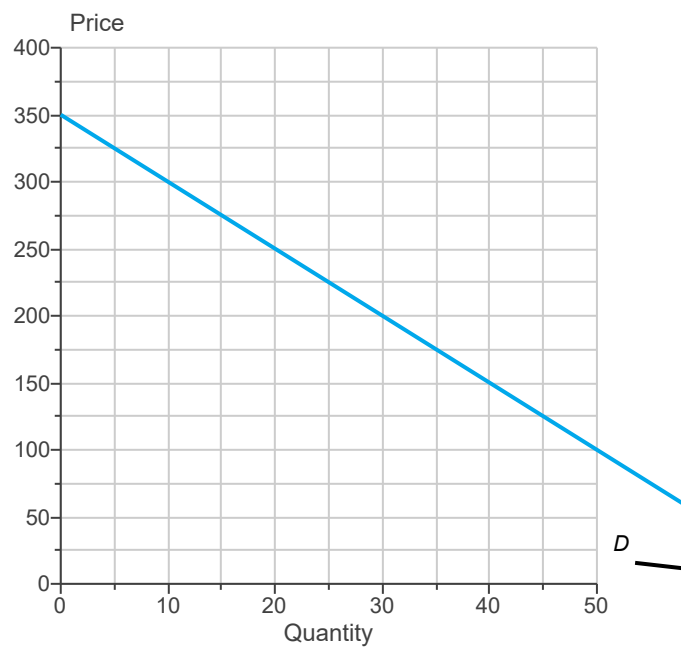
(1) increases

13. D. rose; fell

14. A. many buyers and sellers; no single buyer or seller

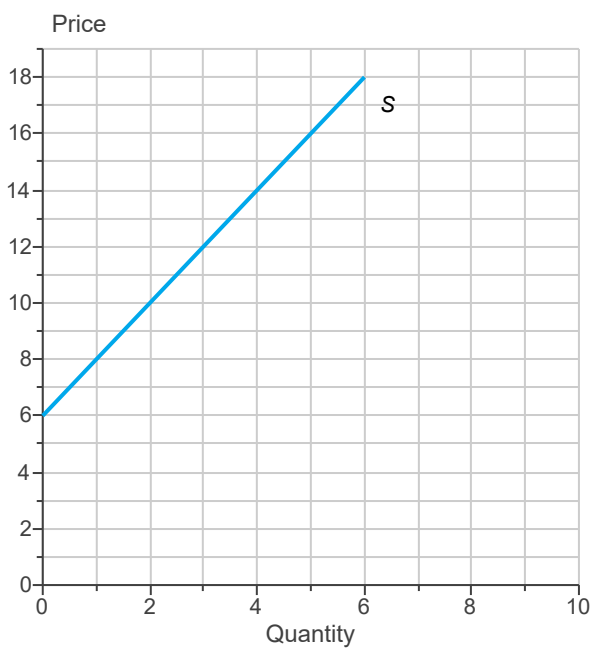
15. A. 7.1 ; 85.71

16.



A. $P = 350 - 5Q_D$

17.



B. $P = 6 + 2Q_S$

18. A. 26.8