- Second midterm is next Monday. Will probably cover through chapter 17, not cumulative. (The final will be cumulative.)

- Find out your discussion section (e.g. A13) and write it on both the analytical part of the exam and the scantron (in the subject area).

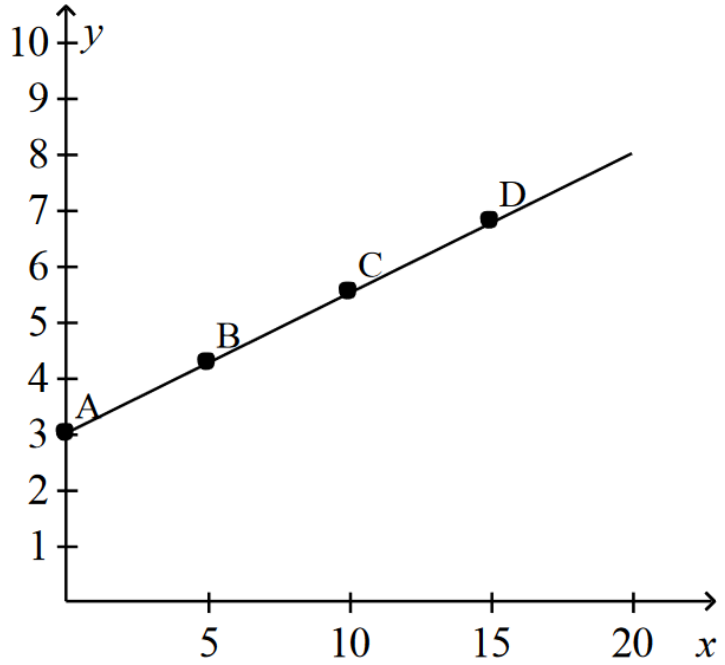
- Make sure to write down your ID number correctly (on the scantron).

- **You will lose points if you fail to include the correct discussion section on both the analytical and the scantron; and if you fail to include your correct ID number on the scantron.**

- No, I'm not kidding.

- I'll have more material about chapters 16 and 17 on my website later this week so you'll have more to study from. Bad timing for us since we've only had one lecture about it.

Problem 1.



x represents risk and y represents return.

Point A represents a situation in which

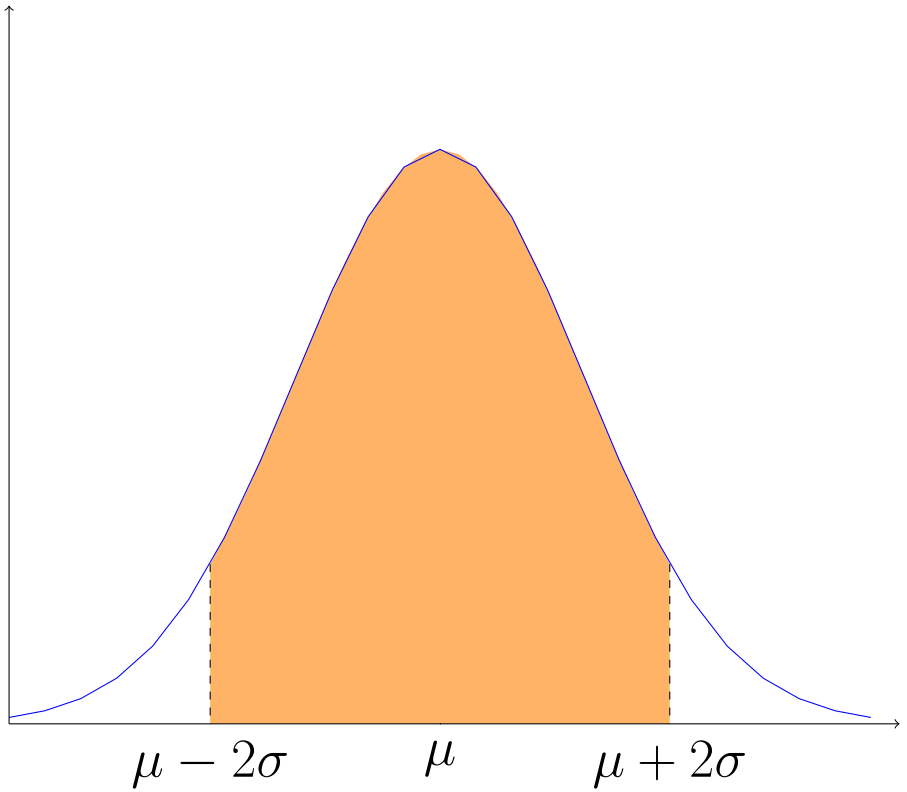
(a) all of a persons savings are allocated to a class of safe assets.

(b) the person knows with certainty that his or her return will be 3 percent.

(c) the standard deviation of the persons portfolio is zero.

(d) All of the above are correct.

A **normal distribution** has a typical bell-curve shape. It is centered around its mean, μ, and its "spread" is expressed by its standard deviation, σ. One property of normal distributions is that approximately 95% of the area underneath the curve is found between two standard deviations of the mean.

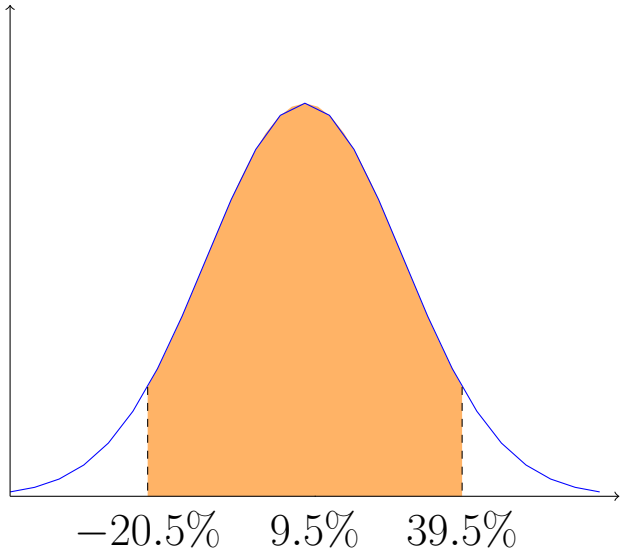


The shaded area is 95% of the area underneath the curve. Thus, there is a 95% chance that an occurrence will be somewhere between $\mu - 2\sigma$ and $\mu + 2\sigma$.

Problem 2. Suppose Juanita's portfolio contains 75% diversified stocks and 25% risk-free government bonds with an annual return of 9.5% and a standard deviation of 15%. The returns will typically (about 95% of the time) be within what interval?

Answer 2. The mean is $\mu = 9.5$, and the standard deviation is 15. Thus, there is a 95% chance that the actual return is in the interval

$$[9.5 - 2 \times 15, 9.5 + 2 \times 15] = [-20.5, 39.5].$$



- Unemployment resulting from the process of matching workers and jobs is called **frictional unemployment**, and it is often thought to explain relatively short spells of unemployment. For example, if you graduate from university, you can't necessarily expect to find a job straight away which matches your skills. This period of searching for a job is known as frictional unemployment.
- When the quantity of labor supplied exceeds the quantity demanded, this sort of unemployment is called **structural unemployment**, and it is often thought to explain longer spells of unemployment. For example, Internet news killed a lot of newspapers, and those workers don't all have Internet skills.
- Changes in the composition of demand among industries or regions are called **sectoral shifts**. It takes time for workers to search for jobs in the new sectors, so sectoral shifts temporarily cause unemployment. Internet news is an example—they demand more tech and fewer printers or paper delivery boys.
- According to the theory of **efficiency wages**, firms operate more efficiently if wages are above the equilibrium level. Therefore, it may be profitable for firms to keep wages high even in the presence of a surplus of labor.

Problem 3. Consumers decide to ride bikes more and drive cars less. Bicycle companies expand production while automobile companies fire workers. This is an example of

(a) frictional unemployment created by sectoral shifts.

(b) frictional unemployment created by efficiency wages.

(c) structural unemployment created by efficiency wages.

(d) structural unemployment created by sectoral shifts.

Problem 4. An economist claims that changes in information technology and unemployment insurance have reduced unemployment. Which of these changes affect frictional unemployment?

(a) both the changes in information technology and unemployment insurance

(b) only the changes in information technology

(c) only the changes in unemployment insurance

(d) neither the changes in information technology nor the changes in unemployment insurance

Problem 5. Yves is an unpaid worker in his family's bakery. The Bureau of Labor Statistics counts Yves as

(a) unemployed and in the labor force.

(b) unemployed and not in the labor force.

(c) employed and in the labor force.

(d) employed and not in the labor force.

Problem 6. Sheamous loses his job and decides to sit on the beach rather than look for work during the next few months. Other things the same, the unemployment rate

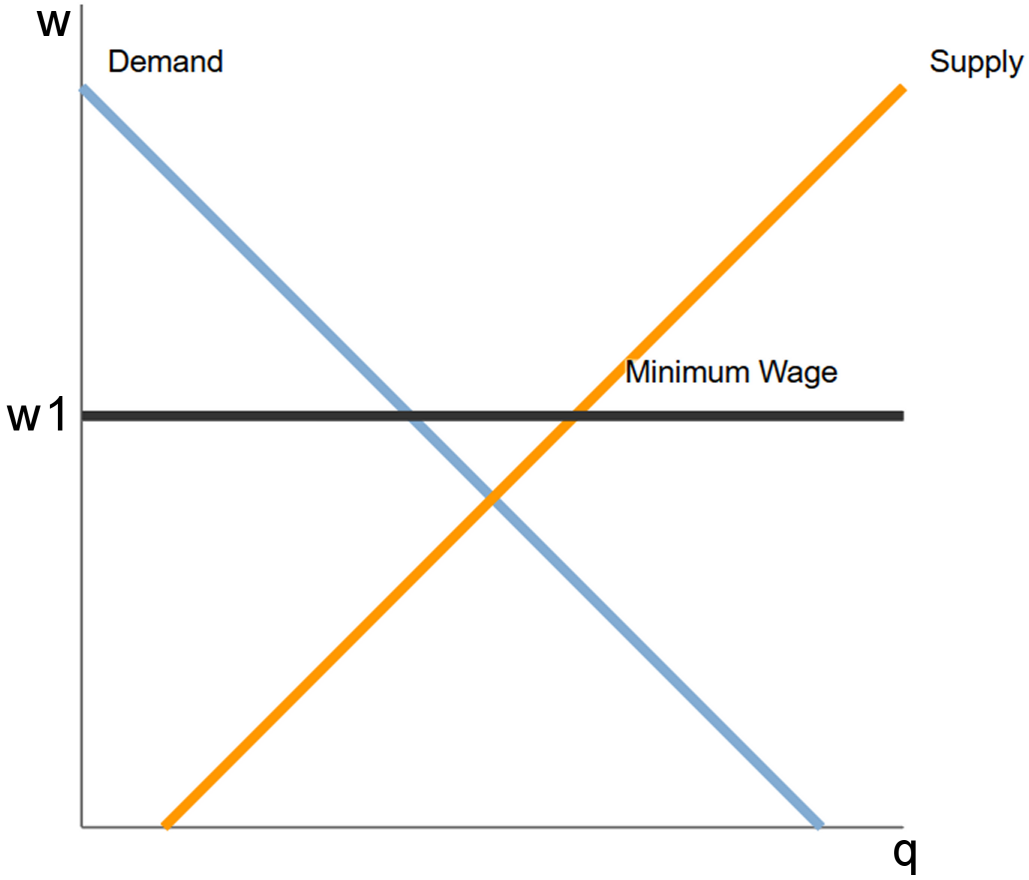
(a) increases and the labor-force participation rate decreases.

(b) increases and the labor-force participation rate is unaffected.

(c) is unaffected and the labor-force participation rate decreases.

(d) and the labor-force participation rate are both unaffected

Problem 7.



(a) Indicate the quantity of labor demanded and the quantity of labor supplied at the wage shown.

(b) Show what happens if there is an increase in the minimum wage.

Problem 8. The ability of insurance to spread risk is limited by

(a) risk aversion and moral hazard.

(b) risk aversion and adverse selection.

(c) moral hazard and adverse selection.

(d) risk aversion only.

Problem 9. According to the efficient markets hypothesis,

(a) changes in stock prices are impossible to predict from public information.

(b) excessive diversification can reduce an investors expected portfolio returns.

(c) the stock market moves based on the changing animal spirits of investors.

(d) actively managed mutual funds should give higher returns than index funds.

Problem 10. A company that produces golf clubs is considering buying some new equipment that it expects will increase future profits. If the interest rate falls the present value of these future earnings

(a) rises. The company is more likely to buy the equipment.

(b) rises. The company is less likely to buy the equipment.

(c) falls. The company is more likely to buy the equipment.

(d) falls. The company is less likely to buy the equipment.

Problem 11. If stock prices follow a random walk, it means

(a) long periods of declining prices are followed by long periods of rising prices.

(b) the greater the number of consecutive days of price declines, the greater the probability prices will increase the following day.

(c) stock prices are unrelated to random events that shock the economy.

(d) stock prices are just as likely to rise as to fall at any given time.

Problem 12. Which of the following is a function of money?

(a) a unit of account

(b) a store of value

(c) medium of exchange

(d) All of the above are correct

Problem 13. Which of the following is both a store of value and regularly used as a medium of exchange?

(a) cash and stocks

(b) cash but not stocks

(c) stocks but not cash

(d) neither cash nor stocks

The quantity of money circulating in the economy is called the **money stock**. **Liquidity** is the ease with which an asset can be converted into the economy's medium of exchange. We can measure the money stock differently depending on how liquid an asset is.

- **M1** consists of the most highly liquid assets—coins and currency in circulation, traveler's checks, demand deposits (eg checking account), and other checkable deposits.
- **M2** includes all of M1 and a collection of additional assets that are slightly less liquid—savings accounts, money market deposit accounts, small time deposits (including certificates of deposits), and retail money market mutual funds.

Point is, the money stock for the U.S. economy includes not just currency but also deposits in banks and other financial institutions that can be readily accessed and used to buy goods and services.

Problem 14. M1 equals currency plus demand deposits plus

(a) nothing else.

(b) other checkable deposits.

(c) traveler's checks plus other checkable deposits.

(d) traveler's checks plus other checkable deposits plus savings deposits.

Problem 15. Credit card limits are included in

(a) M1 but not M2.

(b) M2 but not M1.

(c) M1 and M2.

(d) neither M1 nor M2.

- Money in the form of a commodity with intrinsic value is called **commodity money**.
- Gold coins are an example of commodity money.
- When an economy uses gold as money (or uses paper money that is convertible into gold on demand), it is said to be operating under a **gold standard**.
- Money without intrinsic value is called **fiat money**.
- A fiat is an order or decree, and fiat money is established as money by government decree.
- To a large extent, the acceptance of fiat money depends as much on expectations and social convention as on government decree.
- Fiat money is only useful as money because every agrees that it's useful as money.
- If suddenly everyone decides not to accept dollar bills, then that piece of paper becomes worthless since its value is not backed by gold or any other intrinsically valuable asset.

- The **Federal Reserve** regulates the U.S. system of fiat money.
- The **money supply** is the quantity of money available in the economy.
- The **Federal Open Market Committee (FOMC)** has the power to increase or decrease the number of dollars in the economy.
- The Fed's primary tool is the **open-market operation**—the purchase and sale of U.S. government bonds.

Problem 16. When conducting an open-market sale, the Fed

(a) buys government bonds, and in so doing increases the money supply.

(b) buys government bonds, and in so doing decreases the money supply.

(c) sells government bonds, and in so doing increases the money supply.

(d) sells government bonds, and in so doing decreases the money supply.