

ROUND 1

1. If the Federal Reserve sells a significant amount of government securities in the open market, what will happen to the total quantity of loans made by commercial banks?
ANS: Decrease
2. What is the Latin term used in economics for the assumption that all other things will stay constant over time?
ANS: Ceteris Paribus
3. Name the four components of Gross Domestic Product.
ANS: Consumption, Investment, Growth, Net Exports (must have all 4, order is irrelevant)
4. Nobelist Al Roth is well-known for his work in which market, where exchanges are in-kind rather than monetary due to ethical concerns?
ANS: Kidneys
5. Consider a pro-export government that prohibits grain imports. If the government establishes a subsidy of \$10 per ton of grain exported, what would be the effect on consumer surplus?
ANS: Decrease
6. What is the policy instrument that the Fed uses most often to regulate the money supply?
ANS: Open Market Operations
7. The current market price for a jar of honey is \$50, and the equilibrium quantity is 100 jars. Due to a supply shift arising from bad weather, the price rises to \$54 and the quantity drops to 90. Calculate the magnitude of the price elasticity of demand for honey using the percent formula.
Answer: 1.25 (Do NOT accept -1.25)
8. What is the name of the curve that shows the short-run tradeoff between inflation and unemployment?
Answer: Phillips curve
9. If the government imposes a price ceiling on a market which is below that market's equilibrium price, what will be the result?
Answer: a shortfall
10. Kevin, an American consumer, has a Marginal Propensity to Consume of 0.8. One day, the U.S. government implements a tax credit that results in an \$80 tax deduction for Kevin. By how much will his consumption increase?
Answer: \$64

11. In one hour, person A can type 5 pages of text or paint $\frac{5}{6}$ of a fence, while person B can type 1 page of text or paint $\frac{1}{7}$ of a fence. Who has a comparative advantage in typing?
ANS: B
12. What is the name of the effect that offsets the multiplier effect when conducting expansionary fiscal policy and results from increased government borrowing?
ANS: Crowding out
13. The Gini coefficient for a certain country is 0.3. What is the area under its Lorenz curve?
ANS: 0.35
14. What is the name for a measure of satisfaction or happiness commonly used in microeconomics? More formally, this is the function that consumers maximize.
ANS: utility (accept: utility function)
15. If net exports increase by \$15 billion and the marginal propensity to save is 0.3, then what will be the change in aggregate demand?
ANS: \$50 billion
16. What is the name for goods that are both excludable and rival in consumption?
ANS: Private good
17. Consider a family of goods that includes ketchup, tomato paste, hamburgers. From a consumer's standpoint, identify the most likely pair of complements.
ANS: Ketchup, hamburgers
18. As American heavy industry has shifted overseas, many aging ex-manufacturing employees with limited skills have had difficulty finding jobs even in good economic times. Such a situation is characteristic of what type of unemployment?
ANS: Structural
19. During Latin America's economically painful experience in the 1980s, Bolivia experienced hyperinflation of 50,000% per year. Did monthly prices most nearly double, triple, quadruple, or quintuple each month?
ANS: Double
20. What is the elasticity of a vertical demand curve?
ANS: 0 (accept 'perfectly inelastic')

ROUND 2

21. What is the name for the economic approach which, along with Keynesian economics, dominates the discipline today? It is marked by a focus on supply and demand, utility and profit maximization, and rational expectations.
ANS: Neoclassical economics
22. Who is the current chairman of the Federal Reserve Board?
ANS: Ben Bernanke
23. The liquidity trap occurs as nominal interest rates approach what value?
ANS: 0% (accept: 0)
24. Several enterprising Harvard students incorporate a company to sell economics-themed T-shirts to visiting tourists. The students must make a monthly \$100 payment to Harvard, and each T-shirt furthermore costs \$9 to produce. If the students sell 10 shirts, what is their average total cost?
ANS: \$19
25. What is the name for goods that are excludable but not rival in consumption?
ANS: Club goods
26. Alex derives utility from coffee and economics publications. A cup of coffee costs \$5 and a publication costs \$15, and the marginal utilities of coffee and publications are respectively 6 and 17. If Alex is utility-maximizing subject to a budget constraint of \$15, what bundle will he purchase?
ANS: Three cups of coffee
27. Recall that Alex's marginal utility from another cup of coffee is 6 and his marginal utility from another economics publication is 17. Now say that his marginal utility from another cup of coffee *and* another economics publication together is 25. What is then true about coffee and economics publications?
ANS: They are complements
28. What is the reserve ratio if a \$50 bank deposit ultimately leads to a \$150 increase in the money supply?
ANS: 0.33 or 1/3.
29. What is the term for spending on capital equipment, inventories, and structures, including household purchases of new housing?
ANS: Investment
30. What is the subfield of economics which studies the effects of cognitive, emotional, and psychological factors on economic decisions?
ANS: Behavioral economics

31. What is the name of the variable which measures the rate at which money circulates throughout the economy?
ANS: Velocity of money
32. Gold, silver, and cigarettes are all examples of what type of money?
ANS: Commodity money
33. A certain good with positive externalities is under-produced relative to the societal optimum. How could the government improve welfare?
ANS: Subsidize the good
34. Two identical firms face the same demand curve and deploy the same production technology to produce their product. The firms have rational expectations and possess the same information. The only difference between the firms is that firm A paid twice as much for the production technology as firm B. Say that firm B eventually shuts down. Will firm A shut down before, at the same time as, after firm B?
ANS: Same time
35. In what city are the headquarters of the World Bank?
ANS: Washington D.C.
36. In the past several years, consumers have increasingly preferred organic foods to other agricultural products. What does this imply about the movement of the demand curve for organic foods?
ANS: It has shifted up (accept 'shifted right' or 'shifted out')
37. Say that the domestic savings rate exogenously increases in a closed economy. What is the effect on the loanable funds market equilibrium in terms of both volume and interest rate?
ANS: Volume increases, interest rate decreases
38. A certain household's demand for electricity is unit elastic. If the household consumes 6 kilowatts of electricity today and the price is 10 cents per kilowatt-hour, what would be the household's approximate consumption if the market price increased to 11 cents?
ANS: 5.4 kilowatts (be lenient on units; also accept values in the range 5.4 to 5.5)
39. Which one of the following goods is traded in a market that is almost perfectly competitive? Gold; laptops; health insurance; or ornamental birdfeeders.
ANS: Gold
40. Published by *The Economist*, the Big Mac Index informally measures what between countries?
ANS: PPP

ROUND 3

41. What is the maturity period of the shortest-dated US debt regularly sold by the US Treasury?
ANS: 28 days (accept: 1 month)
42. To the nearest tenth of a percent, what is the current annualized yield on 28 day Treasury bills?
ANS: 0.1%
43. By full name or acronym, identify the world's largest product cartel.
ANS: Organization of Petroleum Exporting Countries (OPEC)
44. A risk-neutral consumer spends \$2000 on a new computer which has a failure probability of 10% per year for the next ten years. For no additional cost, the manufacturer will repair any failures in the first year free of charge. A premium warranty is also available which will cover any failures in the first three years. What is the consumer's willingness-to-pay for this premium warranty?
ANS: \$400
45. What type of economist studies business cycles and long-run growth?
ANS: macroeconomist (accept: macro)
46. NAFTA [MODERATOR: read as 'naf-tuh' and then spell out the acronym] was a major trade agreement enacted in the 1990's. Name any two of its signatories.
ANS: Two of {USA, Mexico, Canada}
47. In a large open economy, what would be the effect of an increase in National Savings on the real interest rate?
ANS: decrease
48. Rick is a major brick dealer. He competes with Dick, who sells identical bricks down the street. However, Dick's brick delivery costs are higher due to the greater distance. The brick manufacturer requires Rick and Dick to both sell their bricks at the same price. Who will have a larger producer surplus?
ANS: Rick
49. 'Crowding out' can counteract the effectiveness of expansionary fiscal policy. Under a 'crowding out' scenario, what happens to the market interest rate and private investment?
ANS: Interest rate increases, private investment decreases
50. What is the term for an increase in the value of one currency relative to another?
ANS: Appreciation
51. This word is often used in economics to indicate a derivative or an increment – for example, the effect of one additional unit on a variable of interest.
ANS: Marginal

52. This economist, who lends his name to uncompensated demand curves, is best known as the father of marginalism.
ANS: Alfred Marshall
53. Unlike positive economics, this branch of economics is concerned with how the economy *ought* to operate.
ANS: Normative economics
54. Bob earned \$150,000 in taxable income last year. The marginal tax rate on the first \$20,000 was 10%; the marginal rate on the next \$100,000 was 25%; and the marginal tax rate on the remainder was 50%. How much tax does Bob owe?
ANS: \$42,000
55. Despite technological advances and other discoveries, real income per capita failed to increase for most of human history due to concomitant population growth. What is the economic term for such a situation?
ANS: Malthusian trap
56. A farmer uses land (denoted by Z) and labor (denoted by L) to produce food. If the number of units of food the farmer produces is equal to $4Z + 6L$, then what is the marginal rate of technical substitution of land for labor?
ANS: 1.5 (do not accept 2/3)
57. Which economist is credited for the principle that fiscal stimulus has a multiplicative effect?
ANS: John Maynard Keynes (accept: Keynes)
58. Answer both parts of this question. First, are all Giffen goods necessary inferior? Second, are all luxury goods necessarily normal?
ANS: Yes and yes
59. What is the term for a bond that makes a single payment of its face value at maturity?
ANS: Zero-coupon bond
60. Who is the current president of the European Central Bank?
ANS: Mario Draghi

ROUND OF 16

61. The value today of a certain nominal bond is not known with certainty due to interest rate fluctuations that will happen in the future. Say that there is an 80% chance that the bond is worth \$80 and a 20% chance that the bond is worth \$100. If the bond is sold by one risk-averse person and purchased by another, what is a possible price for the transaction?
ANS: Accept any value between \$80 (inclusive) and \$84 (exclusive).
62. The nominal interest rate can be decomposed as the sum of these two other variables, as per the classical dichotomy.
ANS: Real interest rate and inflation rate.
63. The Harrod-Domar model, the Solow model, the AK model, and Schumpeterian product variety models all attempt to explain what economic phenomenon?
ANS: Long-run growth (accept: growth)
64. For the last several years, the top marginal U.S. personal income tax rate has been 35%. To the nearest percentage point, what is the new top rate in 2013 that applies to income above \$400,000 for a single filer?
ANS: 40%
65. When the price of a good changes, what two effects jointly determine the change in a consumer's quantity demanded of that good?
ANS: Income and substitution effects
66. Albert produces paintings using a single input – time. Say that the relationship between the number of paintings produced, N , and the time spent painting, T , is $N = T^2$. What kind of returns to scale does Albert have?
ANS: Increasing returns to scale
67. Who introduced the theory of liquidity preference?
ANS: Keynes
68. What is the term that describes the limit of attainable values for the nominal interest rate? This has been a recent issue due to the Fed's aggressive monetary expansion.
ANS: Zero lower bound
69. One way around the zero lower bound is to perform open-market operations on a wider variety of financial instruments, which the Fed has implemented. How else can monetary expansion be continued beyond the zero lower bound?
ANS: Increase inflation
70. Jack's Aunt, who lives in Pittsburgh, purchases a rare Babe Ruth baseball card at a collector's estate sale. In which component(s) of GDP, if any, is this purchase counted?
ANS: Not counted

71. If \$500 billion in government spending leads to \$700 billion in additional demand for goods and services, what is the marginal propensity to consume? You may leave your answer as a fraction.
ANS: $2/7$ (*****doesn't look right*****)
72. The total difference between the price that consumers do pay and the highest price they would be willing to pay is known as what?
ANS: Consumer surplus
73. Say that a particular firm is a profit-maximizing price-taker. In terms of the firm's costs, what is the lowest market price at which it would continue to produce in the short run?
ANS: Average variable cost
74. Rounded to the nearest whole percent, what was the U.S. inflation rate in 2012?
ANS: 2%
75. A manufacturer sells widgets to retailers at a price of \$20 but requires that retailers sell them to consumers for at least \$25. Is this an example of a price floor, predatory pricing, resale price maintenance, or monopolistic pricing?
ANS: Resale price maintenance
76. If the Fed wants to implement contractionary fiscal policy, what open market operation should it undertake?
ANS: Sell bonds
77. The answer to this question has two parts. If the Fed announces today that it will increase interest rates starting on May 1st, what direction will the stock market move (up or down) and when (today or May 1st)?
ANS: Down today
78. If the Dow Jones Industrial Average starts at 10,000 and grows at an annual rate of 10%, what is its value after three years?
ANS: 13310
79. A certain consumer gets utility from two perfectly substitutable goods. What is the functional form of the consumer's utility?
ANS: Linear
80. If a country devalues its currency, what will happen to net exports?
ANS: Increase

QUARTERFINALS

81. What is the name of the equation that relates the nominal interest rate to the real interest rate, and expected inflation?
ANS: Fisher equation
82. A profit-maximizing firm experiences diseconomies of scale. If the firm's good sells for \$3 per unit and the firm faces a real interest rate of 6%, what must be the marginal product of one dollar of capital?
ANS: 0.02
83. Who is the Governor of the Bank of England?
ANS: Mervyn King (Mark Carney acceptable)
84. What is the name for the total set of workers, including both the employed and the unemployed?
ANS: labor force (accept work force)
85. In the 14th century, Europe was ravaged by the Black Death, with the European labor force being reduced to 50% of its former level. Consider this as a shift in the labor supply. If the labor demand curve had unit elasticity and did not shift, what was the impact of the Black Death on wages and total employment?
ANS: Wages increase, employment decreases
86. Consider a demand curve with unit price elasticity. At a price of 1, the quantity demanded is 10. At a 50% higher price of 1.5, is the quantity demanded greater than, equal to, or less than 5?
ANS: Greater than 5 (accept 6.66, 6.67, or 20/3)
87. This economic principle states that consumers' needs determine the production of goods.
ANS: Consumer sovereignty
88. The market for backpacks is at equilibrium. A new technology is developed that reduces the cost to produce backpacks. Assuming nothing else changes, what happens to the equilibrium quantity of backpacks?
ANS: Increases
89. A college student experiences utility from education and recreation. If his indifference curves consist of horizontal and vertical lines with a 90 degree kink, what is the relationship between education and recreation?
ANS: Perfect complements (do not accept: complements)
90. Suppose that Ingrid, Josh, and Kaleb are working on a presentation, which can either be passable or good. In alphabetical order, each student has the option to publicly contribute \$1 to making the presentation good. If at least two people contribute, it will be good; otherwise it will be passable. Ingrid values making it good instead of passable at \$4, Josh at \$6, and

Kaleb at \$3. Which players contribute?

ANS: Josh and Kaleb

91. On a short-run Phillips curve, what does a high inflation rate correspond to?

ANS: Low unemployment

92. A new house is constructed in Minnesota and purchased by Emily. What category / categories of GDP would it be counted in (if any)?

ANS: Investment

93. If the Laffer curve of a nation is given by $\text{Revenue} = -5t^2 + 60t + 100$, where t is the tax rate in percent, what is the revenue-maximizing tax rate?

ANS: 12% (accept: 12)

94. Consumers demand a variety of goods which are made from various plastics. Ethylene is a factor of production used to make plastics. What is the specific term that describes demand by plastics manufacturers for ethylene?

ANS: Derived demand

95. These workers are not currently employed, but they are not included in unemployment statistics.

ANS: Discouraged workers

96. A certain good with positive externalities is produced and sold on a market in decentralized equilibrium. What is the relationship between the quantity in this market and the socially optimal quantity?

ANS: Market quantity is lower than optimal quantity

97. The Dow Jones Industrial Average recently surpassed 14,000 points. What is the only other year in which it has topped 14,000 points?

ANS: 2007

98. What is the law, named after a 19th-century French economist, which states that supply creates its own demand?

ANS: Say's law

99. What is the largest item on the Fed's balance sheet?

ANS: Reserve bank credit

100. Which of the following is an example of a club good? Would it be coal, caviar, tablet computers, or cable TV? ANS: Cable TV

SEMIFINALS

101. What is the value of the misery index if the unemployment rate is 5%, the nominal interest rate is 22%, and the real interest rate is 7%?
ANS: 20 (accept 20%)
102. Okun's Law posits a 2% decrease in GDP for every 1 percentage point increase in what variable?
ANS: Unemployment
103. Suppose the government imposes a \$1 tax on sodas larger than 20 ounces. If demand for large sodas is very elastic but supply is somewhat inelastic, what would be the primary incidence of the tax?
ANS: Mostly suppliers (equivalent answers acceptable)
104. Who is the US Treasury Secretary?
ANS: Jack Lew
105. To the nearest ten thousand dollars, what is the U.S. national debt per citizen?
ANS: \$50,000
106. When the price of an asset rises far above its fundamental value, the market is said to be experiencing what?
ANS: Speculative bubble (accept: bubble)
107. Name the brand of neo-classical economics established in Vienna during the late 19th century and the first half of the 20th century. It opposed the use of economic theories to justify government intervention in the economy and was backed by prominent economists including Friedrich Hayek.
ANS: Austrian economics
108. What is the most commonly used index for stock market volatility?
ANS: VIX (pronounced: "vicks"), the Chicago Board Options Exchange Market Volatility Index
109. Identify all four countries in the BRIC (pronounce: "brick", DO NOT SPELL) group.
ANS: Brazil, Russia, India, China – accept in any order
110. Bond, shares, and derivatives contracts are all examples of this type of financial instrument.

ANS: Securities

111. Developed by Milton Friedman, this theory states that people spread their spending evenly throughout their lives to adjust for differences in income.

ANS: Permanent Income Hypothesis

112. If the market demand curve for a good is $D = 200 - 2p$, where D is the quantity demanded and p is the price, what is the inverse demand curve?

ANS: $P = 100 - 0.5D$

113. Suppose that the Economics Club places a value of \$100 on holding its economics competition in Sever Hall, and a value of \$25 on holding its economics competition in Emerson Hall; the Classics Club places a value of \$75 on holding its competition in Sever Hall and a value of \$50 on holding its competition in Emerson Hall. Harvard allocates the right to hold a competition in Sever Hall to the Classics Club, and the right to hold a competition in Emerson Hall to the Economics club. Suppose that they decide to bargain over these rights in accordance with the Coase theorem. Given that each club can only hold its competition in one Hall, which halls will the two groups hold their competitions in, and what is one possible payment from the Economics Club to the Classics club?

ANS: Economics in Sever; Classics in Emerson. Accept any value from \$25 to \$75.

114. What is the current U.S. unemployment rate rounded to the nearest percent?

ANS: 8% (accept: 7.7%)

115. If Gotham purchases \$10000 in bonds issued by the government and spends \$20000 in opening up a hamburger joint in Needham, and Needham buys \$800 in stock from Wayne Enterprises in Gotham, what is the net capital outflow for Needham?

ANS: \$22,000

116. In 1997, a major financial crisis crippled Southeast Asia. In which country did this crisis begin?

ANS: Thailand

117. What is the name for a period of rising unemployment and high inflation?

ANS: Stagflation

118. The Council of Economic Advisors, or CEA, works for and advises whom?

ANS: President of the U.S. (accept: the president)

119. To the nearest trillion dollars, how large is the Fed's current balance sheet?

ANS: \$3 trillion

120. Svetlana and Pafnuty are trying to decide on a place to get lunch. Their two choices are Kremlin Cafe and McDonald's. If they both go to Kremlin Cafe, their utilities are 10 and 5, respectively. If they both go to McDonald's, their utilities are 5 and 10. If they choose to go to different restaurants, their utilities are both 0. How many equilibrium strategies exist?
ANS: 3

FINALS

121. What is the most volatile component of GDP?
ANS: Inflation
122. What is the economic term used to describe the cost incurred by firms when changing their prices?
ANS: Menu costs
123. Use the midpoint method to determine the price elasticity of demand of bananas given that at a price of \$0.80, quantity demanded is 200 units, while at a price of \$1.00, quantity demanded is 100 units.
ANS: 3
124. Which European has the highest public debt as a fraction of GDP?
ANS: Greece
125. If the demand curve for a good is given by $D = 36 - 6P$, where D is the quantity demanded and p is the price, what is the maximum possible revenue in this market, and at which price will this value be obtained?
ANS: Price = 3, Revenue = \$4
126. By what factor will GDP increase if the quantity of money doubles, the velocity of money doubles, and the price level is halved?
ANS: 8
127. If Country XYZ had an adult population of 250, 150 employed workers, and 50 discouraged workers, what would be the unemployment rate?
ANS: 25%
128. What is the term for an allocation where nobody can be made better off without making someone else worse off?
ANS: Pareto efficient
129. Which unit of the Department of Labor calculates and announces the Consumer Price Index?

ANS: BLS (Bureau of Labor Statistics)

130. Country XYZ has an open economy. What is the net capital outflow if GDP = \$500, consumption = \$300, government spending = \$100, and investment = \$25?

ANS: \$50

131. Amartya Sen and Mahbub ul Haq created the HDI for the United Nations. What does HDI stand for?

ANS: Human Development Index

132. The answer to this question has two parts. How will an increase in the reserve-deposit ratio(rr) change the money multiplier(m) and the Money supply(M)?

ANS: Decrease; decrease

133. In his book *Wealth of Nations*, Adam Smith used the example of a pin factory to demonstrate what economic principle?

ANS: Division of Labor

134. In August 2011, Standard and Poors downgraded their credit rating of the United States federal government to which notch?

ANS: AA+

135. The international monetary trilemma, also called the impossible trinity, is a set of three economic policies that cannot simultaneously be maintained. Identify any two.

ANS: Any two of: fixed exchange rate; free capital flows; independent monetary policy.

136. What does FOMC stand for?

ANS: Federal Open Market Committee

137. The Federal Open Market Committee can have a maximum of how many voting members?

ANS: 12

138. The International Monetary Fund, or IMF, was founded at what conference?

ANS: Bretton Woods

139. A company currently produces 8,000 laptop computers. The Average Variable Cost is \$3 per computer, and the Average Total Cost is \$5 per computer. Now assume that the company increases its production level to 16,000 computers. What is the new Average Fixed Cost for this company?

ANS: \$1

140. Money is said to be neutral if real variables such as employment and real GDP are unaffected by the level of the money supply. If money is superneutral, what are real variables unaffected by?

ANS: Rate of money supply growth