

Northwestern Economics Tournament  
2020 Practice Round

In response to participant feedback, we have modified the format of the Economics Bowl for the NET 2020 competition.

Changes to this year's competition include:

- Questions will be presented in pairs of a **TOSS-UP** and a **BONUS**
- Questions are either *Multiple Choice* or *Short Answer*
- Toss-ups will be read to all eight players. Players **MAY NOT** collaborate during the toss-up. Only one player on each team may attempt to buzz in on a toss-up
- The team that successfully answers the toss-up will be eligible for the bonus question
- Multiple choice questions may be answered in one of three ways:
  - (1) Letter only (e.g. W, X, Y, or Z)
  - (2) Verbal answer only (e.g. “upwards”)
  - (3) Letter AND verbal answer (e.g. “W, upwards”)
    - If the verbal answer is provided, it must match the question *exactly as it is written* (e.g. “leftwards” or “up” will be incorrect if the question indicates “upwards”)
- For short answer questions, equivalent answers will be accepted. Numerical answers must be given in exact and simplest form
- *Scoring*:
  - Toss-ups are worth +4 points
  - Bonuses are worth +10 points
- *Penalties* (+4 points to opposing team):
  - \*Conferring with team members during toss-up
  - \*Distracting behavior during bonus
  - Unsuccessful interrupt
  - Blurt (answering before being recognized by the moderator)

\*New penalties

A complete set of rules will be made available on the NET Website:

<https://www.economics.northwestern.edu/undergraduate/net/>

**(1) TOSS-UP**

*Short Answer.* Real aggregate spending falls when the price level rises due to three different causes. Which of these three causes accounts for the fact that higher prices diminish the value of accumulated nominal assets, causing consumers to save more?

ANSWER: Wealth effect

**(1) BONUS**

*Short Answer.* Consumers can use their discretion in choosing what to do with their disposable income. What term describes how much additional money a consumer will spend domestically if they are given an additional dollar of income?

ANSWER: Marginal propensity to consume

**(2) TOSS-UP**

*Multiple Choice.* In what market type are companies *primarily* characterized by differentiated goods?

- W) Perfect competition
- X) Monopolistic competition
- Y) Oligopoly
- Z) Monopsony

ANSWER: X) Monopolistic competition

**(2) BONUS**

*Short Answer.* The quantity demanded for a product is given by the equation  $P = 50 - 2Q$ , where P and Q represent price and quantity, respectively. If price rises very slightly from  $P = 24$ , what happens to total expenditure?

ANSWER: Total expenditure increases (accept equivalent answers)

**(3) TOSS-UP**

*Short Answer.* In the 1960s, Milton Friedman and Edmund Phelps further developed the concept that “full employment” does not mean “zero unemployment.” When an economy is in a steady state of full employment, what term refers to the proportion of the workforce that is unemployed?

ANSWER: Natural rate of unemployment

**(3) BONUS**

*Short Answer.* Suppose that Country A has a population of 300 million. Its labor force participation rate is 67% and 150 million people are employed. To the nearest percent, what is Country A’s unemployment rate?

ANSWER: 25%

**(4) TOSS-UP**

*Multiple Choice.* According to the Law of Demand, an increase in price will result in which of the following outcomes?

- W) an upward shift of the demand curve
- X) an increase in equilibrium price
- Y) a decrease in quantity demanded
- Z) an increase in quantity demanded

ANSWER: Y) a decrease in quantity demanded

**(4) BONUS**

*Multiple Choice.* Suppose that in the market for apples, supply is given by  $Q_s = -5 + 2P$  and demand is given by  $Q_d = 35 - 3P$ . If a tax of \$2 is levied on the good, what proportion of the tax is borne by consumers?

ANSWER: 0.4 (accept 40%)

**(5) TOSS-UP**

*Multiple Choice.* When a consumer faces two goods that are perfect complements, the production function may be classified as which of the following?

- W) Leontief
- X) Cobb-Douglas
- Y) Translog
- Z) Constant Elasticity of Production

ANSWER: W) Leontief

**(5) BONUS**

*Short Answer.* Suppose that the production of good G is given by the equation  $G = AL^{0.75}K^2$  [L to the power of 0.75 times K to the power of 2] where A is total factor productivity and L and K are units of labor and capital used, respectively. If labor usage increases by 3%, what is the percent increase in production of good G?

ANSWER: 2.25%

**(6) TOSS-UP**

*Short Answer.* This American institution was established in the 1933 Banking Act. Its members meet about eight times a year and include the Federal Reserve Board of Governors and five Federal Reserve Bank presidents. This institution sets a target level for the federal funds rate to meet the Fed's short-term objectives. What is the name of the institution within the Fed that oversees open market operations?

ANSWER: Federal Open Market Committee

**(6) BONUS**

*Short Answer.* The Federal Reserve's dual mandate drives the monetary policy goals that affect inflation and the unemployment rate. In contrast, the European Central Bank (ECB) has a "hierarchical" mandate. What is the primary mandate of the European Central Bank?

ANSWER: Price stability

**(7) TOSS-UP**

*Short Answer.* In 1980, Martin Feldstein and Charles Horioka introduced an oft-discussed macroeconomic and international finance puzzle. They argued that if there was perfect capital mobility, there should be low correlation between which TWO economic variables?

ANSWER: Domestic savings and investment [need both for correct answer]

**(7) BONUS**

*Short Answer.* Rank the following 4 countries in *increasing* order of nominal GDP per capita (1) China (2) Iran (3) South Korea (4) Poland

ANSWER: (2) Iran (1) China (4) Poland (3) South Korea [Data from 2018, IMF/World Bank/UN]

**(8) TOSS-UP**

*Multiple Choice.* Technological advances represent, *ceteris paribus*, what transformation of the production possibilities frontier?

- W) shift inward
- X) shift outward
- Y) bowing inward
- Z) bowing outward

ANSWER: X) shift outward

**(8) BONUS**

*Short Answer.* When the price of a good rises, the tendency to purchase less expensive goods that serve the same purpose of the original good is known as what?

ANSWER: Substitution effect

**(9) TOSS-UP**

*Multiple Choice.* A cold summer has decreased the demand for ice-cream, at the same time the government starts to subsidize the ice-cream producers. What happens to the market?

- W) Equilibrium price increases
- X) Quantity demanded increases
- Y) Quantity supplied increases
- Z) Equilibrium price decreases

ANSWER: Z) Equilibrium price decreases

**(9) BONUS**

*Short Answer.* A hot summer has increased the demand for watermelons, at the same time an excise tax is placed on watermelons. As a result, either the equilibrium price or the equilibrium quantity changes unambiguously. Which of these two market parameters changes, and in what direction?

ANSWER: Price increases

**(10) TOSS-UP**

*Short Answer.* Suppose Firm A sells mugs for \$6 each and its marginal product of labor for each of the first four workers is 5, 6, 3, and 2. If the market wage rate is fixed at \$14, how many workers will firm A hire?

ANSWER: 3

**(10) BONUS**

*Short Answer.* In Cournot competition, firms primarily compete on setting what metric?

ANSWER: Quantity

**(11) TOSS-UP**

*Short Answer.* A scandal involving this company led the US government to pass the Sarbanes-Oxley act in 2002 and caused the de facto dissolution of the accounting firm Arthur Andersen. What Houston-based energy company, which declared bankruptcy in 2001, was infamous for its fraudulent accounting practices and insider trading?

ANSWER: Enron

**(11) BONUS**

*Short Answer.* This piece of legislation was part of the 1933 Banking Act and was repealed by the Gramm-Leach-Bliley Act of 1999. It included provisions on selling, investing, and underwriting securities. What piece of federal legislation is known for separating commercial and investment banking activities?

ANSWER: Glass-Steagall Act

**(12) TOSS-UP**

*Short Answer.* Suppose that quantity demanded is given by  $Q_d = 200 - 10P$  and quantity supplied is given by  $Q_s = 10P$ , where  $P$  is price. What is the total surplus from this market?

ANSWER: 1000

**(12) BONUS**

*Short Answer.* As the price of sneakers increases from \$100 to \$120, the quantity of sneakers demanded decreases from 50 to 45. Using the endpoint method on the data given, what is the absolute value of the price elasticity of demand?

ANSWER: +0.5 [must be positive]

**(13) TOSS-UP**

*Multiple Choice.* According to Okun's Law, a 2% increase in Gross Domestic product will correspond to what change in unemployment rate?

- W) 4% decrease
- X) 1% decrease
- Y) 1% increase
- Z) 4% increase

ANSWER: X) 1% decrease

**(13) BONUS**

*Short Answer.* What economic growth model predicts that all countries will converge to the same income level as poor countries automatically enjoy rapid catch-up growth?

ANSWER: Solow Model

**(14) TOSS-UP**

*Multiple Choice.* What is the effect of a temporary supply shock on inflation rate and output?

- W) inflation decreases, output decreases
- X) inflation decreases, output increases
- Y) inflation increases, output decreases
- Z) inflation increases, output increases

ANSWER: Y) inflation increases and output decreases

**(14) BONUS**

*Short Answer.* What concept asserts that money available at the present time is worth more than the same amount in the future due to its potential earning capacity?

ANSWER: Time value of money



**(15) TOSS-UP**

*Multiple Choice.* In the short run, the shutdown condition for a firm occurs when price is less than

- W) average variable cost
- X) marginal product of labor
- Y) average fixed cost
- Z) marginal cost

ANSWER: W) average variable cost

**(15) BONUS**

*Short Answer.* Aaron prefers hamburgers to hot dogs and prefers hot dogs to pizza. What assumption of consumer choice permits the conclusion that Aaron prefers hamburgers to pizza?

ANSWER: Transitivity