



**Answers**

**1 Business Decisions**

*An optimist is trying to get a job as a CEO. Her constant optimism is well-known to everyone: she always believes that the probability of a good outcome is higher than it actually is. Which of the following firms should hire her?*

A.	An insurance firm operated in a competitive market, serving customers with an unknown probability of an accident	
B.	A natural monopoly that faces uncertainty about future government regulation policies	
C.	One of the few major car manufacturers in the oligopolistic market with an uncertain demand function	Correct
D.	No one because her irrationality will reduce the expected profit	

**2 Competition**

*Which of the following can be observed in a perfectly competitive market?*

#	Answers	
A.	Huge advertising expenditures	
B.	Substantial investment in R&D	
C.	Significant economic rents in the long run	
D.	All trades take place at the same price	Correct

**3 Development**

*Choose the correct statement about economic development.*

#	Answers	
A.	Share of labor devoted to agriculture generally declines as countries get richer	Correct
B.	With the Industrial Revolution, the dominating sector of most economies moved from agriculture to services	
C.	Economic growth is always associated with the decrease in the annual hours worked by an average person	
D.	Average GDP per capita in the World increased by more than 50 times during the second half of the 20th century	

## 4 Empirical Economics

<i>Which one of the following is an example of a natural experiment?</i>		
#	Answers	
A.	To conduct clinical trials of a new medication, patients are randomly divided into two groups	
B.	To see which textbooks are more efficient to study math, the government obliges half of the country's schools to use textbook A and the other half to use textbook B	
C.	Different regions of a country may have different fines for speeding, so one can study how changes in fines affect drivers' behavior	Correct
D.	None of the other options is correct	

## 5 Environment

<i>Which of the following is the most practical and effective policy to deal with carbon emissions caused by driving a car?</i>		
#	Answers	
A.	A quota on individuals to limit their driving	
B.	A subsidy to car sharing operators	Correct
C.	A petrol tax	Correct
D.	Nationalization of all car producers	
<b>Comment</b>	The Jury has decided to count two options as correct answers	

## 6 Finance

<i>Consider a preferred share that entitles the shareholder to receive \$600 on April 1 each year forever, however, the firm can postpone payments in some cases. On March 31, 2022, when the share price was \$6600, the firm announced that it decided to postpone the payment for 1 year because of insufficient cash on hand. So, instead of the payment on April 1, 2022, the shareholders will receive a double payment on April 1, 2023. Find the approximate share price right after the announcement, other things being equal.</i>		
#	Answers	
A.	\$6600	
B.	\$6545	Correct
C.	\$6000	
D.	\$5871	

## 7 Finance

<i>Following the unexpected interest rate increase, the price of which of the following risk-free bonds will drop the most (in percentage to its pre-interest-rate-increase price)</i>		
#	Answers	
A.	Long-term zero-coupon bonds	Correct
B.	Long-term bonds with high fixed coupon rates	
C.	Short-term zero-coupon bonds	
D.	Short-term bonds with high fixed coupon rates	

## 8 Foreign Exchange

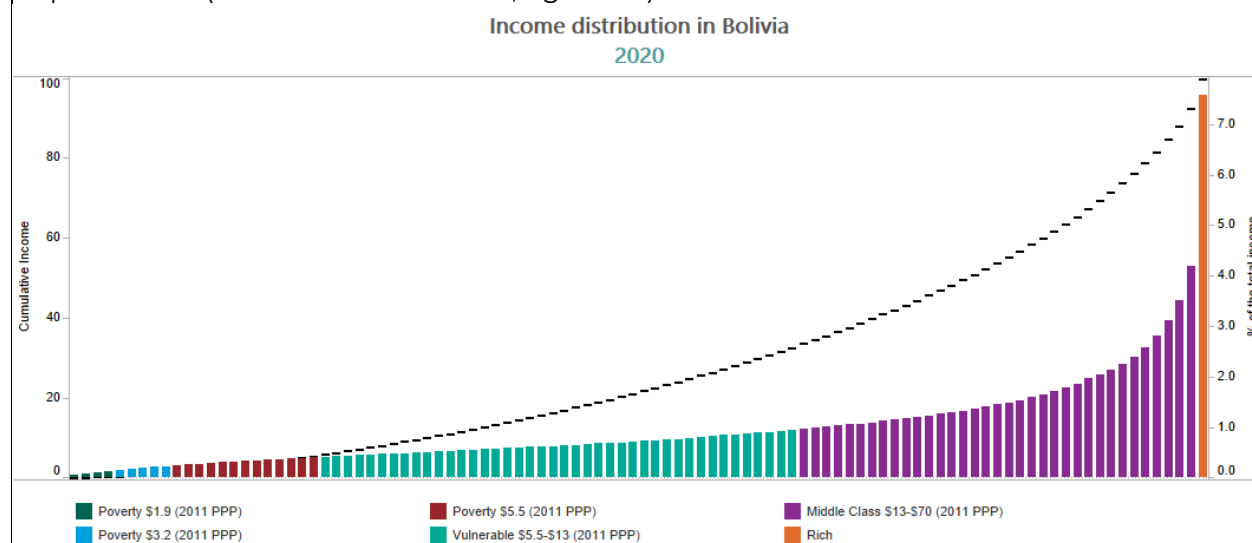
An unanticipated increase in domestic interest rate will, most likely, lead to		
#	Answers	
A.	Depreciation of domestic currency in the short run	
B.	Appreciation of domestic currency in the short run	Correct
C.	Increase in domestic investment in the short run	
D.	Increase in domestic taxes in the short run	

## 9 Inequality

Economist G calculates income inequality in some real-world country based on the Gini coefficient and the <u>pretax</u> (gross) incomes of all households in the society. Economist D calculates income inequality in the same country based on the Gini coefficient and the <u>disposable</u> incomes of all households in the society. Which of the following is likely to be true?		
#	Answers	
A.	G's Gini coefficient is smaller than D's	
B.	D's Gini coefficient is smaller than G's	Correct
C.	The two Gini coefficients are the same	
D.	None of the other statements is true	

## 10 Inequality

In this diagram, you can see the income distribution in Bolivia in 2020 based on the available microdata. The dashed line is the cumulative income (left axis), colorful bars represent income of all percentiles (without accumulation, right axis).



Source: LAC Equity Lab tabulations of SEDLAC (CEDLAS and the World Bank) and World Development Indicators (WDI).

Note: The dashed line represents cumulative income. Since the numbers presented here are based on SEDLAC, a regional data harmonization effort that increases cross-country comparability, they may differ from official statistics reported by governments and national statistical offices. The LAC aggregate is based on 18 countries in the region for which microdata are available. In cases where data are unavailable for a given country in a given year, values have been interpolated using WDI data to calculate regional measures. All monetary values are reported as USD in 2011 purchasing power parity.

What is the closest estimate of the Gini Index?

#	Answers	
A.	0	
B.	0.4	Correct
C.	0.8	
D.	1	

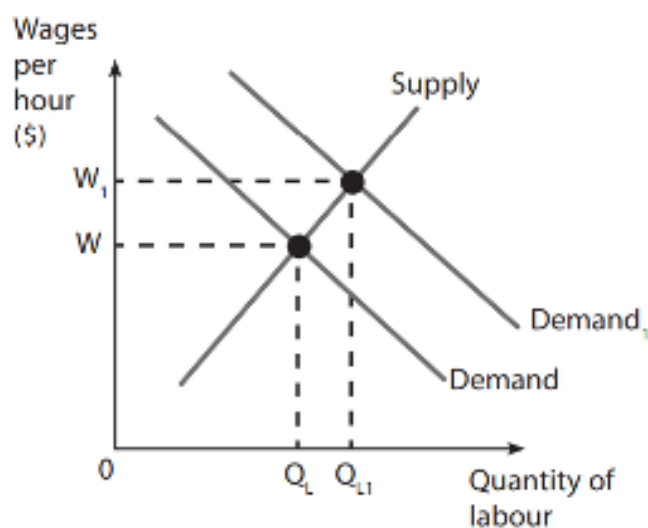
## 11 International Trade

Which of the following is the least likely to prevent the 'Law on One Price' from holding in international trade?

#	Answers	
A.	One monopolist supplier on multiple markets & inability to resell the traded good	
B.	Import tariffs	
C.	Common land border between the exporting and the importing countries	Correct
D.	Transportation costs	

## 12 Labor Market

The diagram shows a competitive labor market. Which one of the following could NOT cause the increase in the wage rate from  $W$  to  $W_1$  as shown in the diagram?



#	Answers	
A.	An increase in the productivity of labor	
B.	A wave of immigration of workers	Correct
C.	Government subsidy to firms who hire workers in this industry	
D.	An increase in demand for the final product	

## 13 Labor Market

Under which circumstances may setting the minimum wage increase employment?

#	Answers	
A.	Perfectly competitive labor market	
B.	Employers have market power in wage setting	Correct
C.	Having heard about the minimum wage, new labor force immigrates (assume perfectly competitive labor market)	
D.	None of the other answers is correct	

## 14 Macroeconomic Data

<i>What is the closest estimate of the whole World's GDP (in current USD)?</i>		
#	Answers	
A.	100 billion	
B.	1 trillion	
C.	100 trillion	Correct
D.	1,000 trillion	

## 15 Macroeconomic Data

<i>Which of the following pairs of indicators commonly have positive correlation?</i>		
#	Answers	
A.	Bond prices and interest rates	
B.	Inflation and unemployment	
C.	GDP and unemployment	
D.	GDP and job creation	Correct

## 16 Macroeconomic Policies

<i>Choose the correct statement.</i>		
#	Answers	
A.	A reduction in tax rates is a monetary policy used to fight recession	
B.	Stagflation is caused by a sharp decrease in Aggregate Demand	
C.	A decrease in required reserves is one of the policies that can be used to fight inflation	
D.	All other statements are false	Correct

## 17 Market Failures

<i>Which one of the following is an example of market failure?</i>		
#	Answers	
A.	Workers of a firm take less care of the office equipment because the employer will cover the repair costs	Correct
B.	Government provision of fire stations that is greater than the social optimum number	
C.	Lower wages overseas create incentives for firms to hire foreign workers	
D.	Unintended consequences that follow the introduction of an indirect tax	

## 18 Monopoly and Oligopoly

<i>The monopoly works in a market with demand curve <math>Q = 1190/P^2</math>, its total cost function is given by <math>TC = 2Q</math>. The government decides that the firm must split into two, and these two firms will compete by simultaneously choosing prices. Assuming one-shot interaction, what is the percentage change of their joint profit after splitting?</i>		
#	Answers	
A.	-14%	
B.	-100%	Correct
C.	0%	
D.	+15%	

## 19 Monopoly and tax

A monopolist with the demand function  $Q = 100 - P$  and marginal cost  $MC = \$20$  faces the per-unit tax of  $t = \$10$ . By how much will the price for consumers increase?

#	Answers	
A.	\$5	Correct
B.	\$10	
C.	5%	
D.	10%	

## 20 Oligopoly

Choose the correct statement regarding a duopolistic market.

#	Answers	
A.	If firms compete by choosing quantities, each of them wants to be the second to make a choice	
B.	If firms repeat their game three times (periods), a monopoly profit can be achieved in the first period	
C.	If firms compete by choosing prices, each of them wants to be the first to make a choice	
D.	If firms merge, their joint profit will increase compared to the one under duopoly	Correct