## MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.

1) Who is not counted in the U.S. labor force?
A) a person working 15 hours a week or more, not for pay
B) a full-time college student
C) a person working at least one hour for pay per week
D) someone actively looking for a job
E) a 70-year-old person who supplements his Social Security payments by working eight hours each week at the minimum wage

## Question Details

AACSB : Reflective Thinking
Topic : Measuring the Labor Force
Accessibility : Keyboard Navigation
Difficulty: 01 Easy
Bloom's : Remember
2) Of the 500,000 people (age $16+$ ) in a particular country, 300,000 people are in the labor force. Of these, 240,000 are employed and 60,000 are unemployed. What is the labor force participation rate?
A) $25 \%$
B) $48 \%$
C) $55 \%$
D) $60 \%$
E) $80 \%$

## Question Details

AACSB : Reflective Thinking
Topic: Measuring the Labor Force
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
3) Of the 500,000 people (age 16+) in a particular country, 300,000 people are in the labor force. Of these, 240,000 are employed and 60,000 are unemployed. What is the unemployment rate?
A) $10 \%$
B) $20 \%$
C) $30 \%$
D) $35 \%$
E) $40 \%$

## Question Details

AACSB : Reflective Thinking
Topic : Measuring the Labor Force
Accessibility: Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
4) Of the 500,000 people (age $16+$ ) in a particular country, 300,000 people are in the labor force. Of these, 240,000 are employed and 60,000 are unemployed. Of the 200,000 workers not in the labor force, 20,000 want jobs but have given up looking for one. What is the unemployment rate if discouraged workers (i.e., the hidden unemployed) are counted as being unemployed?
A) $10 \%$
B) $20 \%$
C) $25 \%$
D) $48 \%$
E) $60 \%$

## Question Details

Topic : Measuring the Labor Force
Accessibility : Keyboard Navigation
AACSB : Knowledge Application
Difficulty : 03 Hard
Bloom's : Apply
5) How does the presence of an underground labor market bias the government's calculation of the labor force participation rate?
A) The official government statistic on labor force participation is too low because people working in the underground labor market should be counted as being in the labor market and employed.
B) The official government statistic on labor force participation is too high because people working in the underground labor market should be counted as being in the labor market but unemployed.
C) The official government statistic on labor force participation is too low because people working in the underground labor market should not be counted as being in the labor market.
D) The official government statistic on labor force participation is too high because people working in the underground labor market should not be counted as being in the labor market.
E) The official government statistic on labor force participation is identical to actual labor market participation whether or not there is an underground labor market.

## Question Details

Topic: Measuring the Labor Force
Accessibility : Keyboard Navigation
AACSB : Analytical Thinking
Bloom's : Analyze
Difficulty : 03 Hard
6) How does the labor force participation rate of women compare to that of men in the United States?
A) The labor force participation rates between the two groups is about the same.
B) Men participate less than women at all ages.
C) Women participate less than men at all ages.
D) Women participate less than men when young (20-34 years old) but at the same rate as men in later years (35-54 years old).
E) Men participate less than women when young (20-34 years old) but at the same rate as women in later years (35-54 years old).

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 01 Easy
Bloom's : Remember
Topic : Basic Facts about Labor Supply
7) Which of the following best describes the historical pattern in the average number of hours worked per week in the United States when the large drop during the Great Depression is ignored?
A) Average hours decreased from 60 hours per week in 1900 to 40 hours per week in 1960, with average hours holding steady since 1960.
B) Average hours have been consistently between 35 and 40 hours from 1900 through 2010.
C) Average hours increased from 25 hours per week on average in 1900 to over 40 hours per week in 2010.
D) Average hours constantly fell from about 55 hours per week in 1900 to about 33 hours per week in 2010.
E) Average hours held constant at 50 hours per week from 1900 through 1960; since 1960 average hours have consistently fallen to just under 25 hours per week in 2010.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty: 01 Easy
Bloom's : Remember
Topic: Basic Facts about Labor Supply
8) The single most important phenomenon in the U.S. labor market in the second half of the twentieth century was
A) the drastic reduction in the labor force participation rate of males.
B) the drastic increase in the labor force participation rate of females.
C) the elimination of the glass ceiling.
D) the increase in the average number of hours worked each week.
E) the elimination of child poverty.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : Basic Facts about Labor Supply
9) Which of the following is not a property of standard indifference curves in a leisureconsumption model?
A) Indifference curves tend to be downward sloping.
B) Higher indifference curves (to the northeast) indicate higher levels of utility.
C) Indifference curves tend to be convex to the origin.
D) There is an indifference curve passing through every leisure-consumption bundle.
E) Indifference curves intersect one another.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : The Worker's Preferences
10) An increase in nonlabor income while holding the wage rate constant
A) rotates the budget line out along the consumption axis.
B) rotates the budget line out along the leisure axis.
C) rotates the budget line in along the leisure axis.
D) rotates the budget line in along the consumption axis.
E) shifts the budget line up while maintaining the same slope.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : The Budget Constraint
11) What is the budget line for consumption ( $C$ ) and leisure ( $L$ ) if a person faces a constant wage of $\$ 10$ per hour, there are 112 hours in the week to work, and she receives nonlabor income of $\$ 220$ per week?
A) $C=1340$
B) $C+10 L=1340$
C) $L=10 C+220$
D) $C-10 L=900$
E) $10 C-L=900$

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : The Budget Constraint
12) All of the following represent an increase in nonlabor income except
A) a decrease in the income tax rate.
B) receiving higher dividends from a stock portfolio.
C) an increase in a spouse's wage.
D) receiving an inheritance from a long-lost uncle who recently passed away.
E) having one's property tax bill fall by $\$ 1000$.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty: 02 Medium
Bloom's : Understand
Topic : The Budget Constraint
13) When the tax rate on wages falls (so that the take-home wage or effective wage increases), the budget line
A) rotates out along the consumption axis.
B) shifts out, parallel to the old budget line.
C) rotates in along the leisure axis.
D) shifts in, parallel to the old budget line.
E) rotates out along the leisure axis.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : The Budget Constraint
14) According to the substitution effect, in response to an increase in her wage, a person will
A) reduce hours worked because she wants to substitute leisure for work.
B) reduce hours worked because she wants to substitute work for leisure.
C) increase hours worked because leisure has become relatively more expensive than consumption.
D) increase hours worked because leisure has become relatively less expensive than consumption.
E) increase both consumption and hours of leisure.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : The Hours of Work Decision
15) According to the income effect, an increase in the wage rate will lead the worker to
A) work more hours if leisure is a normal good.
B) work fewer hours if leisure is a normal good.
C) work fewer hours if leisure is an inferior good.
D) work more hours and leisure more hours.
E) not change hours worked.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : The Hours of Work Decision
16) Assuming consumption and leisure are both normal goods, hours worked will fall when the wage increases if
A) the income effect dominates the substitution effect.
B) the substitution effect dominates the income effect.
C) if the income and substitution effect move in the same direction (i.e., if they are of the same sign).
D) if the income and substitution effect move in the opposite direction (i.e., if they are of the opposite sign).
E) the wage increase is accompanied by an increase in prices.

## Question Details

Accessibility : Keyboard Navigation
AACSB : Analytical Thinking
Difficulty : 03 Hard
Topic : The Hours of Work Decision
Bloom's : Evaluate
17) What would a person do if the market wage is less than his or her reservation wage?
A) The person will enter the labor market.
B) The person will work as much as possible.
C) The person will work more hours as the wage falls further.
D) The person will be unemployed.
E) The person will not participate in the labor force.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : To Work or Not to Work?
18) The reservation wage likely increases when
A) the price of consumption increases.
B) the wage increases.
C) the price level (of consumption and wages) increases.
D) nonlabor income increases.
E) one is a discouraged worker.

## Question Details

Accessibility : Keyboard Navigation
AACSB : Analytical Thinking
Bloom's : Analyze
Difficulty : 03 Hard
Topic : To Work or Not to Work?
19) The consensus estimate of the elasticity of labor supply among females is -0.1 . The interpretation of this estimate is what?
A) On average, women will increase hours of work by $10 \%$ when their wage increases by $1 \%$.
B) On average, women will increase hours of work by $1 \%$ when their wage increases by $10 \%$.
C) On average, women will reduce hours of work by $5 \%$ when their wage increases by $10 \%$.
D) On average, women will reduce hours of work by $10 \%$ when their wage increases by $1 \%$.
E) On average, women will reduce hours of work by $1 \%$ when their wage increases by $10 \%$.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : Estimates of the Labor Supply Elasticity
20) When the wage was $\$ 10$ per hour, a group of workers supplied 30 hours of work per week on average. The wage then increased to $\$ 12$ per hour, and the same group of workers supplied 33 hours of work per week on average. What is the elasticity of labor supply for this group of workers?
A) 0
B) 0.5
C) 1.0
D) 1.5
E) 2.0

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty: 02 Medium
Bloom's : Understand
Topic: Estimates of the Labor Supply Elasticity
21) Chris and Jordan are a two-person household. Chris's market hourly wage is $\$ 40$, but Chris can also produce $\$ 20$ of household production each hour. Jordan's market hourly wage is $\$ 50$, but Jordan can also produce $\$ 30$ of household production each hour. This household chooses work schedules to maximize utility. When it does this, which of the following cannot occur.
A) Chris specializes in marketplace work, while Jordan splits time between marketplace and household work.
B) Jordan specializes in marketplace work, while Chris splits time between marketplace and household work.
C) Jordan specializes in household production, while Chris specializes in marketplace work.
D) Chris specializes in marketplace work while Jordan specializes in household production.
E) All of the above results can happen.

## Question Details

Accessibility : Keyboard Navigation
AACSB : Analytical Thinking
Bloom's : Analyze
Difficulty : 03 Hard
Topic: Household Production
22) Prior to an expanded child care subsidy program in Illinois, the labor force participation rate of single mothers in Illinois was $45 \%$ and in Wisconsin was $48 \%$. After Illinois expanded its child care subsidy program, the participation rate increased to $58 \%$ in Illinois and to $51 \%$ in Wisconsin. The expanded child care program in Illinois is estimated to increase labor force participation of single mothers by how much according to a difference-in-differences estimator?
A) $3 \%$
B) $6 \%$
C) $7 \%$
D) $10 \%$
E) $13 \%$

## Question Details

Accessibility : Keyboard Navigation
AACSB : Analytical Thinking
Bloom's : Analyze
Difficulty : 03 Hard
Topic : Welfare Programs and Work Incentives
23) The Earned Income Tax Credit is a federal program that
A) increases the wages of minorities.
B) provides cash assistance to the nonworking poor.
C) provides cash assistance to firms that hire single mothers living in poverty.
D) increases wages for the working poor.
E) provides in-kind assistance to minimum wage workers.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 01 Easy
Bloom's : Remember
Topic : The Earned Income Tax Credit
24) What is the added worker effect?
A) A secondary worker enters the labor force when the wage rate is high.
B) A secondary worker enters the labor force when his or her consumption of goods exceeds his or her nonlabor income.
C) A secondary worker enters the labor force when his or her household productivity increases.
D) A secondary worker enters the labor force when he or she no longer must allocate time to household production.
E) A secondary worker enters the labor force when the main worker in the household has lost his or her job or has experienced a wage cut.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 01 Easy
Bloom's : Remember
Topic : Labor Supply over the Life Cycle
25) Due to the added worker effect, the labor force participation rate
A) increases during a recession.
B) decreases during a recession.
C) is a fairly useless statistic.
D) overcounts the number of workers wanting a job.
E) overcounts the number of workers with a job.

## Question Details

AACSB : Reflective Thinking
Accessibility: Keyboard Navigation
Difficulty: 01 Easy
Bloom's : Remember
Topic: Labor Supply over the Life Cycle
26) What is the discouraged worker effect?
A) A discouraged worker will accept any job offer regardless of the wage.
B) Because a discouraged worker accepts a part-time job when he wants a full-time job, he is considered to still be unemployed.
C) A discouraged worker accepts a part-time job and is therefore counted as being employed.
D) A discouraged worker stops looking for a job but is still counted as being in the labor force.
E) A discouraged worker stops looking for a job and therefore is no longer counted as being in the labor force.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty: 01 Easy
Bloom's : Remember
Topic : Labor Supply over the Life Cycle
27) Why might it be wrong to include self-proclaimed discouraged workers in calculations of the unemployment rate?
A) Discouraged workers likely have a job but are discouraged only because they would like a better-paying job.
B) Some discouraged workers are taking advantage of a low-wage period to consume large amounts of leisure.
C) Discouraged workers receive federal assistance.
D) Discouraged workers are already included in official unemployment statistics as long as no one else in their household is working.
E) By definition, discouraged workers are only temporarily laid-off, and they will return to a job shortly.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty: 02 Medium
Bloom's : Understand
Topic : Labor Supply over the Life Cycle
28) Due to the discouraged worker effect, the labor force participation rate
A) increases during a recession.
B) decreases during a recession.
C) does not change when the unemployment rate increases.
D) overcounts the number of workers wanting a job.
E) overcounts the number of workers with a job.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic: Labor Supply over the Life Cycle
29) The intertemporal substitution hypothesis suggests that hours of work should
A) be greatest during peak wage years.
B) steadily increase with age.
C) steadily decrease with age.
D) be greater for women than for men.
E) increase immediately prior to retirement.

## Question Details

AACSB : Reflective Thinking
Accessibility : Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic : Labor Supply over the Life Cycle
30) Which one of the following conclusions is not supported by the intertemporal substitution hypothesis?
A) The profile of hours of work over the life cycle will have roughly the same shape as the age-earnings profile.
B) Hours of work over the life cycle will be inversely related to wages over the life cycle.
C) Hours of work increase as the wage rises and decline as the wage falls.
D) An unemployed person might choose to become a discouraged worker during a lowwage recession with an eye toward returning to the labor market when wages increase.
E) A high wage worker may choose to work $60+$ hours a week during her peak wage years in order to retire at a younger age later in life.

## Question Details

AACSB : Reflective Thinking
Accessibility: Keyboard Navigation
Difficulty : 02 Medium
Bloom's : Understand
Topic: Labor Supply over the Life Cycle

## Answer Key

Test name: Borjas8E_CH02

1) $B$
2) $D$
3) $B$
4) C
5) A
6) C
7) D
8) B
9) E
10) E
11) $B$
12) A
13) A
14) C
15) B
16) A
17) E
18) D
19) E
20) B
21) B
22) D
23) D
24) E
25) A
26) E
27) B
28) B
29) A
30) B
