

Problem Set 6: Inflation and Unemployment

Questions 1 to 16 refer to the following information:

Calculate the inflation rate for each year based on both the GDP Deflator and the CPI using the following table:

| Year | $P_{\text{Croissant}}$ | $Q_{\text{Croissant}}$ | P_{Coffee} | Q_{Coffee} |
|------------------|------------------------|------------------------|---------------------|---------------------|
| 2017 (base year) | 2.0 | 50 | 1.0 | 75 |
| 2018 | 2.1 | 55 | 1.1 | 75 |
| 2019 | 2.2 | 55 | 1.2 | 80 |
| 2020 | 2.4 | 60 | 1.4 | 80 |

Always round to one decimal and continue your calculation using the rounded values.

1. The GDP Deflator in year 2017 is _____.
 - a. 100
 - b. 107.0
 - c. 114.2
 - d. 128.0
2. The GDP Deflator in year 2018 is _____.
 - a. 100
 - b. 107.0
 - c. 114.2
 - d. 128.0
3. The GDP Deflator in year 2019 is _____.
 - a. 100
 - b. 107.0
 - c. 114.2
 - d. 128.0
4. The GDP Deflator in year 2020 is _____.
 - a. 100
 - b. 107.0
 - c. 114.2
 - d. 128.0

5. The CPI in year 2017 is _____.
a. 100
b. 107.1
c. 114.3
d. 128.6
6. The CPI in year 2018 is _____.
a. 100
b. 107.1
c. 114.3
d. 128.6
7. The CPI in year 2019 is _____.
a. 100
b. 107.1
c. 114.3
d. 128.6
8. The CPI in year 2020 is _____.
a. 100
b. 107.1
c. 114.3
d. 128.6
9. Using the GDP Deflator to calculate the inflation rate for the year 2017, then the inflation rate is _____.
a. 7.0
b. 6.7
c. 12.1
d. Cannot be determined.
10. Using the GDP Deflator to calculate the inflation rate for the year 2018, then the inflation rate is _____.
a. 7.0
b. 6.7
c. 12.1
d. Cannot be determined.
11. Using the GDP Deflator to calculate the inflation rate for the year 2019, then the inflation rate is _____.
a. 7.0
b. 6.7
c. 12.1
d. Cannot be determined.

12. Using the GDP Deflator to calculate the inflation rate for the year 2020, then the inflation rate is _____.

- a. 7.0
- b. 6.7
- c. 12.1
- d. Cannot be determined.

13. Using the CPI to calculate the inflation rate for the year 2017, then the inflation rate is _____.

- a. 7.1
- b. 6.7
- c. 12.5
- d. Cannot be determined.

14. Using the CPI to calculate the inflation rate for the year 2018, then the inflation rate is _____.

- a. 7.1
- b. 6.7
- c. 12.5
- d. Cannot be determined.

15. Using the CPI to calculate the inflation rate for the year 2019, then the inflation rate is _____.

- a. 7.1
- b. 6.7
- c. 12.5
- d. Cannot be determined.

16. Using the CPI to calculate the inflation rate for the year 2020, then the inflation rate is _____.

- a. 7.1
- b. 6.7
- c. 12.5
- d. Cannot be determined.

Questions 17 to 19 refer to the following information:

You are given the following information:

- Number employed: 180 million
- Number unemployed: 11 million
- Adult Population: 300 million

17. Calculate the Labor Force. The Labor Force is _____.

- a. 191 million
- b. 169 million
- c. 289 million
- d. 300 million

18. Calculate the Unemployment Rate. The Unemployment Rate is _____.

- a. 4.2%
- b. 5.2%
- c. 5.8%
- d. 6.8%

19. Calculate the Labor Force Participation Rate. The Labor Force Participation Rate is

- _____.
- a. 60.0%
 - b. 61.5%
 - c. 62.3%
 - d. 63.7%