Write your answer in the space provided or on a separate sheet of paper.

1) Assume a small nation has the following statistics: its consumption expenditure is $15 million, investment is $2 million, government purchases of goods and services is $1 million, exports of goods and services to foreigners is $1 million, and imports of goods and services from foreigners is $1.5 million. Calculate this nation's GDP.

2)

Labor demand (billions of hours per year)	Real wage rate (2009 dollars)	Labor supply (billions of hours per year)
0	30	6
1	25	5
2	20	4
3	15	3
4	10	2

Employment (billions of hours per year)	Real GDP (billions of 2009 dollars)
6	95
5	90
4	80
3	60
2	30

The first table above gives the labor demand and labor supply schedules for a nation. The second table gives its production function.

a) What are the equilibrium real wage rate and the level of employment?

b) What is potential GDP?

3) Friedmania is a country in which the quantity theory of money operates. The country has a constant population, capital stock, and technology so real GDP does not change. In 2014, real GDP was $500 million, the price level, measured by the GDP deflator, was 150 and the velocity of circulation of money was 10. (Because the price level is measured by the GDP deflator, it must be divided by 100 before it is used in the equation of exchange.) In 2015, the quantity of money increased by 20 percent.

a) What was the quantity of money in 2014?

b) What was the velocity of circulation in 2015?

c) What was the price level in 2015?

4)

Price level (GDP deflator, 2009 = 100)	Quantity of real GDP demanded (trillions of 2009 dollars)	Quantity of real GDP supplied (trillions of 2009 dollars)
115	8.8	12.0
110	9.4	11.0
105	10.0	10.0
100	10.6	9.0
95	11.2	8.0

Based on the table above,

a) What is the equilibrium price level and real GDP?

b) If potential GDP is $11.0 trillion, what does that imply about the economy's level of employment?

c) If potential GDP is $9.0 trillion, what does that imply about the economy's level of employment?

5) What does the short-run Phillips curve indicate about the relationship between inflation and unemployment?

6) In the economy of Rulewania, the current inflation rate is 6 percent and the Central Bank's target inflation rate is 2 percent. Real GDP exceeds potential GDP by 1 percent, and the long-term growth rate of real GDP is 5 percent. The medium-term growth rate of the velocity of circulation of the monetary base is 2 percent. According to the Taylor rule, what federal funds rate should the Central Bank set?