Quiz 2

Question 1

a. Define the unemployment rate.

b. Find the unemployment rate if the total number employed is 190 million persons and the labor force totals 200 million persons.

Question 2

a. What does it mean if a production function is constant returns to scale (CRS)?

b. Is the Cobb-Douglas production function CRS? $(Y = f(K, L) = AK^\alpha L^{1-\alpha})$

Question 3

Year	Price of Cereal	Quantity of Cereal	Price of Milk	Quantity of Milk
2015	$4.00	100	$1.50	180
2014	$4.00	120	$2.00	200
2013	$5.00	150	$2.50	200
2012	$6.00	180	$3.50	240

a. Calculate nominal GDP for 2014 and 2015.

b. Calculate real GDP for 2014 and 2015 using 2015 as the base year.

c. What is the GDP deflator for 2014 and 2015?

Question 4

Consider an economy described as follows:

  Y = C + I + G

  Y = 10,000

  G = 2,000

  T = 2,000

  C = 1000 + 3/4(Y - T)

  I = 1500 - 100r

a. Compute private saving, public saving, and national saving

b. Find the equilibrium interest rate.

c. Suppose the government increases purchases by 100. Compute private saving, public saving, and national saving.

d. Find the new equilibrium interest rate.