

Macro Module 11 Marginal Product of Labor practice exam questions

(The attached PDF file has better formatting.)

- In 20X2, real GDP = 723, the price level = 116, and the nominal wage rate = 35.65 / hour
- In 20X3, real GDP = 880, the price level = 170, and the nominal wage rate = 46.27 / hour

The real interest rate, inflation rate, and bank transaction costs do not change, and the real demand for money is proportional to real GDP.

Question 11.1: Real demand for money

What is the percentage change in the real demand for money from 20X2 to 20X3?

Answer 11.1: $(880 / 723) - 1 = 21.72\%$

(real demand for money is proportion to real GDP)

Question 11.2: Real money supply

What is the percentage change in the real money supply from 20X2 to 20X3?

Answer 11.2: 21.72%

(real money supply = real demand for money)

Question 11.3: Nominal money supply

What is the percentage change in the nominal money supply from 20X2 to 20X3?

Answer 11.3: $(1 + 21.72\%) \times (170 / 116) - 1 = 78.38\%$

(multiply by change in the price level)

Question 11.4: Real wage rate

What is the percentage change in the real wage rate from 20X2 to 20X3?

Answer 11.4: $(46.27 / 1.70) / (35.65 / 1.16) - 1 = -11.44\%$

(real wage rate = nominal wage rate / price level)

Question 11.5: Marginal product of labor

What is the percentage change in the marginal product of labor from 20X2 to 20X3?

Answer 11.5: -11.44%

(marginal product of labor is proportion to the real wage rate)