

## Barro Mod 11 ch 9 marginal product of labor practice exam questions

(The attached PDF file has better formatting.)

Country Z has perfectly competitive markets in which labor and all goods clear.

- A firm produces bread using raw material (flour), workers (bakers), and capital (ovens).
- A worker produces 34 loaves of bread each hour.
- Each loaf of bread sells for 4.52.
- The firm uses flour costing 1.35 for each loaf of bread.
- No bread remains unsold each day, and consumers can buy all the bread they want.
- The price level is 1.45.
- The nominal wage rate is 58.18 an hour.
- Firms earn an accounting profit of 2.40 on each loaf of bread.

Question 1.2: Real wage rate

What is the real wage rate for bakers?

Answer 1.2: The real wage rate for bakers is the nominal wage rate divided by the price level

$$= 58.18 / 1.45 = 40.12 \text{ an hour.}$$

Question 1.3: Marginal product of labor (in nominal terms)

What is the marginal product of labor (in nominal terms) for bakers?

Answer 1.3: The marginal product of labor equals the wage rate, so the marginal product of labor (in nominal terms) for bakers equals the nominal wage rate of 58.18 an hour.

Question 1.4: Marginal product of labor (in real terms)

What is the marginal product of labor (in real terms) for bakers?

Answer 1.4: The marginal product of labor (in real terms) for bakers equals the real wage rate of 40.12 an hour.

*Take heed:* The revenue, costs, and profit from producing bread affect the price of bread in competitive markets; they are not directly tied to the marginal product of labor for bakers.