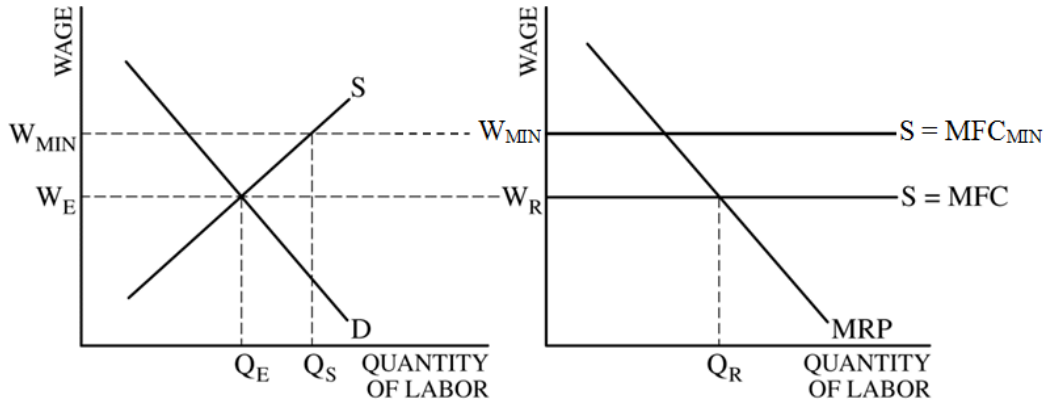


**AP[®] MICROECONOMICS
2014 SCORING GUIDELINES**

Question 2

6 points (2 + 1 + 3)



(a) 2 points:

- One point is earned for drawing a correctly labeled graph of the labor market with an upward-sloping labor supply curve and a downward-sloping labor demand curve and for correctly identifying the equilibrium wage, W_E , and quantity, Q_E .
- One point is earned for drawing a correctly labeled graph showing Ray's Stable demand curve for labor and a horizontal labor supply curve and showing the equilibrium wage, W_R , and quantity, Q_R .

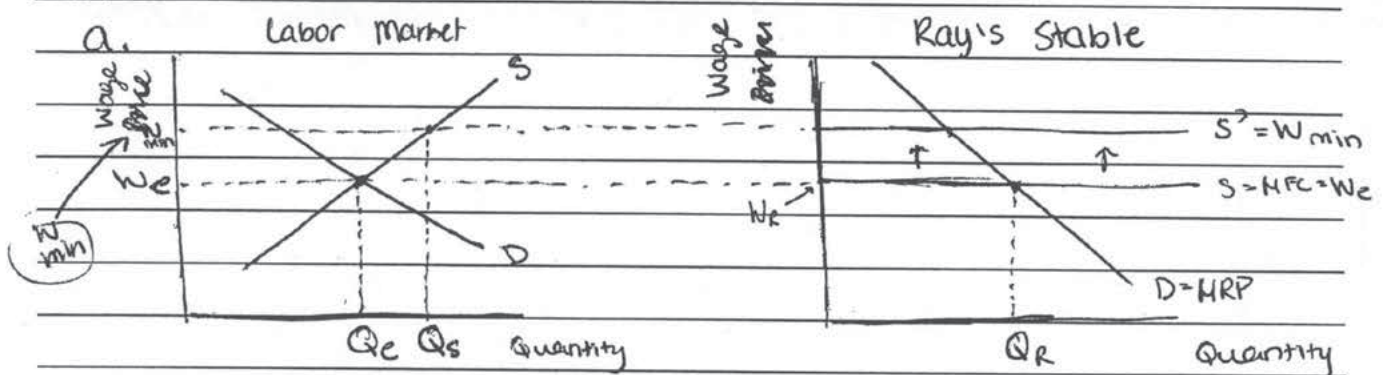
(b) 1 point:

- One point is earned for stating that Ray's Stable's marginal factor cost is equal to W_E , and for explaining that the firm is a wage taker in the labor market and/or the market sets the wage.

(c) 3 points:

- One point is earned for showing the minimum wage, W_{MIN} , on the graph in part (a) above the equilibrium wage W_E .
- One point is earned for showing the quantity supplied of unskilled labor, Q_S , derived from the supply curve at W_{MIN} .
- One point is earned for stating that the marginal revenue product of the last worker hired will increase.

2.



b. The marginal factor cost of unskilled labor for Ray's Stable is equal to W_e because this is a perfectly competitive labor market where firms are wage-takers.

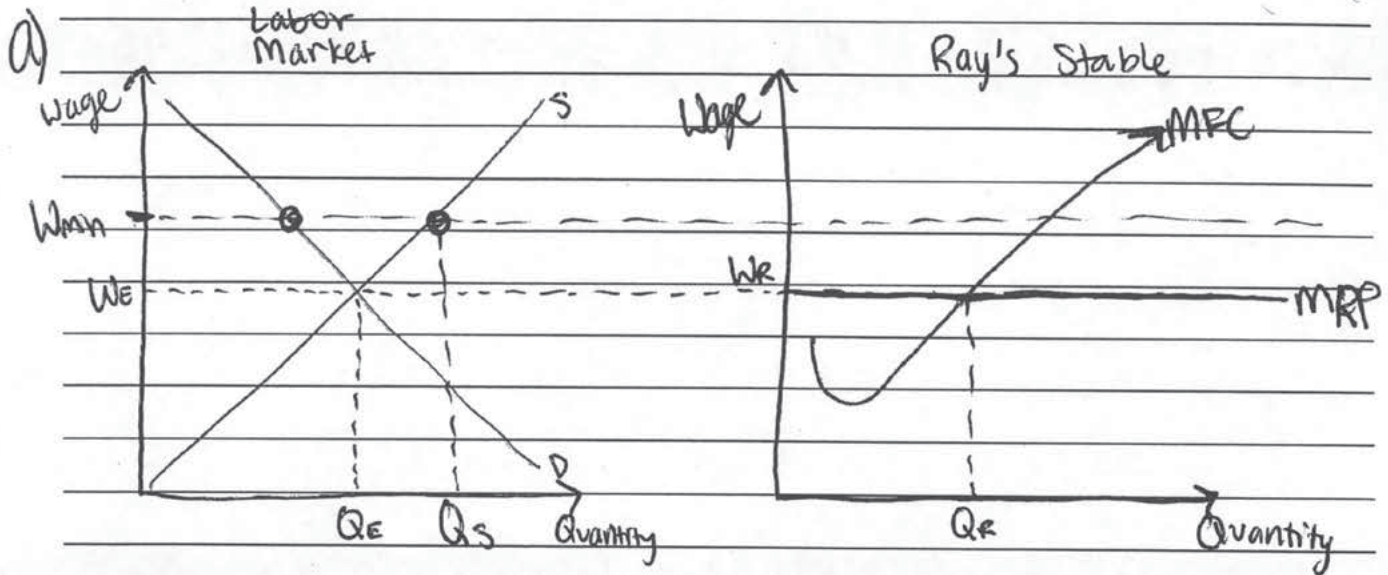
c.

i. (see graph)

ii. (see graph)

iii. Marginal Revenue product of the last worker hired by Ray's Stable increases.

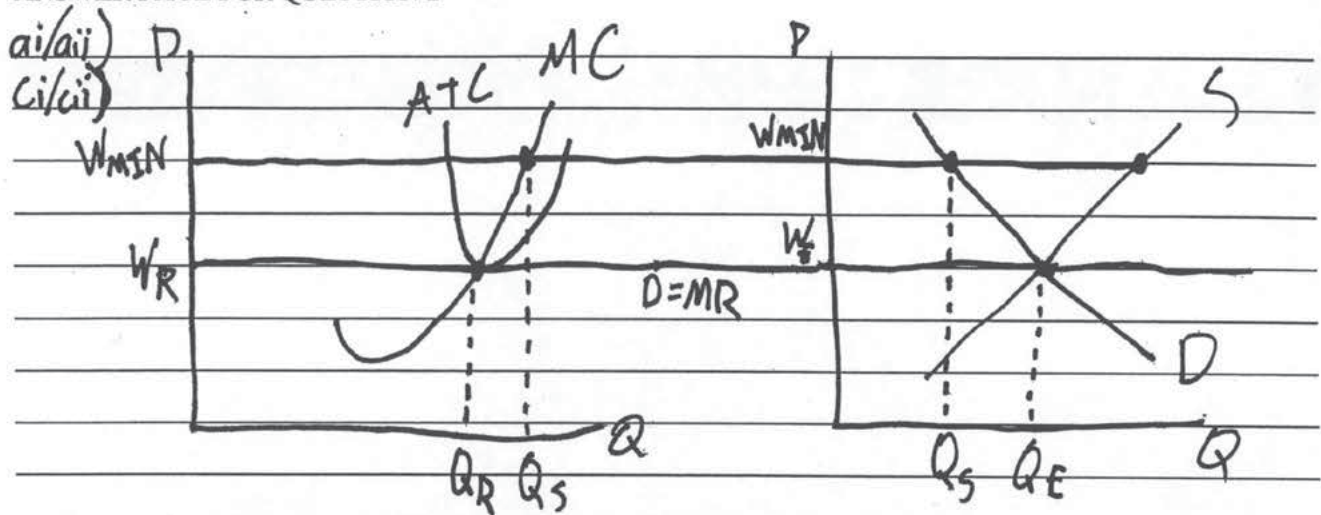
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- b) MFC of unskilled labor for Ray's Stable is equal to W_E because in this perfectly competitive market, Ray is a "wage-taker" so he will have to set the wage at the equilibrium wage.
- c) (iii) The marginal revenue product of the last worker hired by Ray's Stable will stay the same because this is a perfectly competitive factor market so the MRP is perfectly elastic therefore minimum wage will not affect it.

GO ON TO THE NEXT PAGE.

ANSWER PAGE FOR QUESTION 2



b) The marginal factor cost of unskilled labor for Ray's Stable will be ~~equal~~ greater than the equilibrium wage for unskilled labor because the minimum wage acts like a price floor that increases costs of labor.

cii) Marginal revenue product for Ray's Stable's last worker will stay the same.

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AP[®] MICROECONOMICS

2014 SCORING COMMENTARY

Question 2

Overview

This question assessed the student's ability to work with a perfectly competitive factor market. It tested the student's ability to draw a graph for the market and for the firm. The question then examined the student's understanding that the wage set in the market is equal to the wage paid by the firm because the firm has no control over the wage. The question also determined the student's knowledge that an effective minimum wage would be higher than the equilibrium wage. The minimum wage would result in a greater quantity supplied in the market and a higher marginal revenue product for the firm.

Sample: 2A

Score: 6

The student answered all parts of the question correctly and earned all 6 points.

Sample: 2B

Score: 4

The student did not earn 1 point in part (a)(ii) for drawing an incorrectly labeled graph of the labor market. The student did not earn 1 point in part (c)(iii) for incorrectly stating that the marginal revenue product will stay the same.

Sample: 2C

Score: 2

The student earned 1 point in part (a)(i) for drawing a correctly labeled graph of the labor market and for correctly identifying the equilibrium wage, W_E , and the equilibrium quantity, Q_E . The student earned 1 point in part (c)(i) for correctly showing the minimum wage, W_{MIN} , above W_E .