



**AP<sup>®</sup> Micro Economics  
2004 Sample Student Responses  
Form B**

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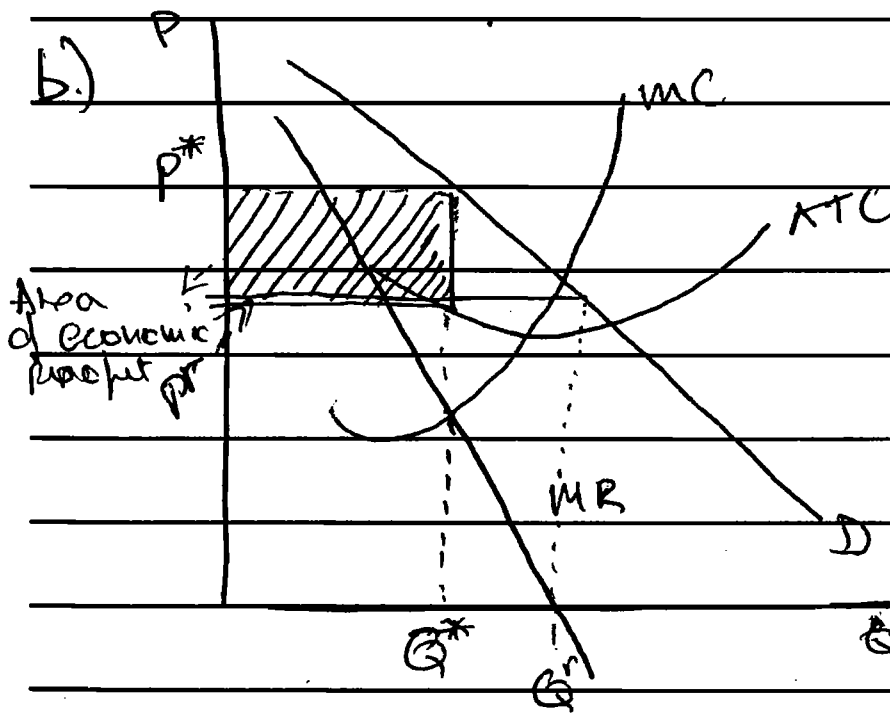
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a.) As Brunelle Inc. enjoys monopoly power, its demand curve is the demand curve for the industry and is therefore downward sloping. Brunelle needs to lower the price of its product in order to sell more output, but this lower price also applies to all previous units of output produced, resulting in a marginal revenue curve that is lower than its demand curve.



c.) As shown above, total revenue is maximized at the level of output at which  $MR = 0$ , and the  $P^r$  is the price level of this quantity off the demand curve.

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d.) No, it is not. At  $Q^*$ , Brunello is producing at a price that is above the marginal cost the firm faces ( $P > MC$ ). In this scenario, there is an underallocation of resources, as society is willing to pay more for the good than it is for other uses of its money.

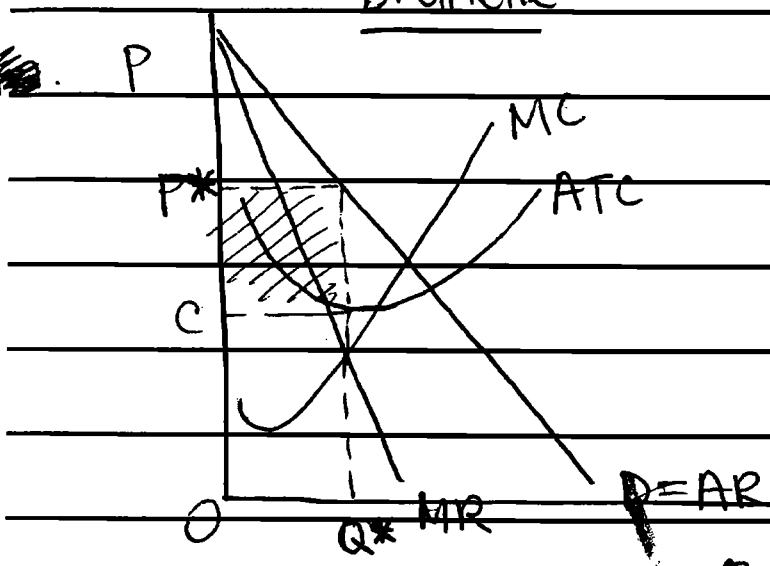
e.) Brunello will clearly lose monopoly power, and as substitutes would emerge for the goods Brunello produces, its demand curve would become more elastic, and therefore less steeply sloped (more horizontal).

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Brunelle

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a) in a monopoly, the demand, or average revenue curve is greater than the marginal revenue curve. This is because, as you sell one more good your average revenue increases

Q However as you lower your

price to sell one more product, you need to lower your price for the previous consumers. So the marginal revenue of selling one more good is equal to the revenue added, minus the lost revenue from previous purchases.

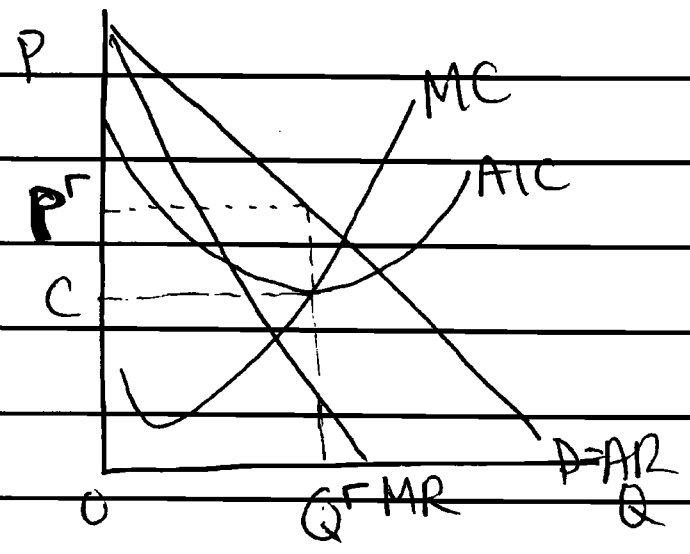
b) (i) & (ii) see above graph for  $Q^*$  and  $P^*$

(iii) see shaded area.

~~economic profits~~ ~~of the total revenue~~ ~~of total costs~~ ~~costs~~  
 shaded area between ~~total revenue~~ ~~total costs~~

c) If Brunelle wanted to maximize total revenue, they would produce

where the ATC is at its minimum



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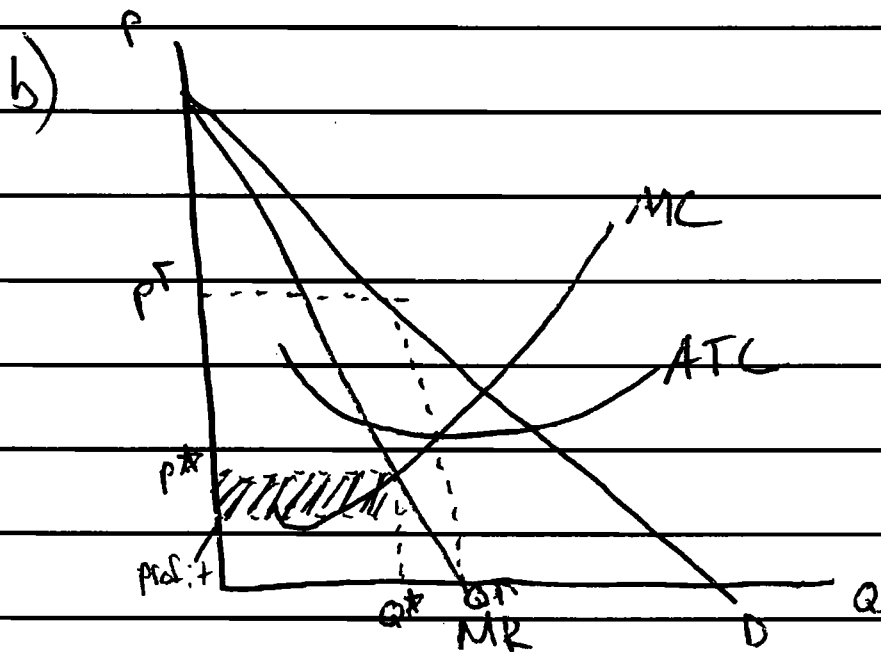
d. No Brunelle is not producing at the allocatively efficient level of output. Allocatively efficient means that the price of the last good sold is equal to the marginal revenue generated by it. Brunelle is selling too little of an output.

e. If more firms adopt the same technology, ~~without~~ ~~be~~ and if there are no barriers for market entry, Brunelle will no longer be a monopoly. This will cause the demand curve to become more elastic. This is because there will be more substitutes for the product, and consumers will go elsewhere if the price gets too high.

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- a) Since  $Q$  price does not equal Marginal revenue the price does not dictate the demand. Brunelle charges a profit maximizing price & at that point the supply does not meet the demand so Marginal revenue is separate & not equal to demand.



c) on above graph

- d) If they are producing at  $P^*$  &  $Q^*$  than yes they are producing the allocatively efficient level of output. This is because  $MC = MR$  at this point and as long as that is true ~~the~~ output is efficiently allocated.

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e) As other firms adopt the same technology as Brunelle the demand for Brunelle's goods will shift to the left and total demand will decrease. This is because others are making the same goods as Brunelle & people can buy the goods elsewhere causing the individual firm of Brunelle to lose demand for its goods.