**AP MICROECONOMICS Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Study Guide Perfect Competition**

 

1. The graph above displays 3 curves: **Marginal Product. Total Product** & **Average Product** of Labor (workers).
	1. Label the appropriate curves as: MP, TP and AP
	2. Explain in some detail the reasons for the shape of the **marginal product of labor** curve
	3. Explain how MP affects the shape of the TP curve. When MP = 0, Total Product is at a\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?

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1. Label all 4 **cost curves** below:



1. Explain why **curve D** starts very high on the Y axis and approaches the X axis but never touch it?

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1. At what point does curve A cross curve B and cross curve C?
	1. Clearly explain why this is true.

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1. Explain what happens to **ATC** (average total cost) during a period of **economies of scale**?
	1. Recall that economies of scale is a LONG RUN concept

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1. List the **five market characteristics** of **Perfect Competition**: (also called a competitive market)
	1. Categories: # of firms, type of product, ease of entry/exit, information, price control

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1. Clearly explain why an individual firm in a competitive market has a **horizontal demand curve**?
	1. What does this imply about the relationship of Price, Average Revenue & Marginal Revenue?

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1. Explain why whenever an individual firm in a competitive market sets **MC = MR** they will **maximize profit**?
	1. Hint: think of the profit on the very last unit!

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1. The market is in equilibrium at a price of $60. Please fill in the following table and find the profit maximizing level of production for this individual competitive firm.
	1. ***Hint:*** *Price = MR for a competitive firm. (they have a horizontal demand curve!)*
	2. Calculate the short run profit for this competitive firm: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (P – ATC) \* Qty
	3. Fixed costs are \_\_\_\_\_\_\_\_ Does this firm have any area of economies of scale: \_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantity Produced** | **Total****Cost** | **Marginal****Cost** |  **Average** **Total C.** | **Average** **Variable C.** | **Quantity Demanded** | **Price** | **Total****Revenue** | **Marginal Revenue** |
|  0 |  100 |  -- | -- | -- |  0 |  60 | -- |  -- |
|  1 |  150 | 50 |  |  |  1 |  60 | 60 | 60 |
|  2 |  202 |  |  | 51.00 |  2 |  60 |  |  |
|  3 |  257 |  | 85.66 | 52.33 |  3 |  60 |  |  |
|  4 |  317 |  | 79.25 | 54.25 |  4 |  60 |  |  |
|  5 |  385 |  |  |  |  5 |  60 |  |  |
|  6 |  465 |  | 77.5 | 60.83 |  6 |  60 |  |  |

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1. The graph above is for an individual firm in a competitive market. Based on the graph & Marginal Cost Table above at a market price of $8: (remember they are a price taker!)
	1. How many units would be produced: \_\_\_\_\_\_\_\_\_\_
	2. What is the economic profit for this firm? \_\_\_\_\_\_\_\_\_\_ Accounting profit? *(above or below economic?)*
	3. If market demand rose causing price to rise to $14 dollars
		1. How many units would be produced: \_\_\_\_\_\_\_\_\_\_\_\_\_\_
		2. Calculate the economic profit of this firm (show calculations…)
		3. Draw the **profit area** in the graph above

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1. Based on the graphs above list 3 requirements for a competitive market to be in **long run equilibrium**
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1. Analyze the difference between the **short run supply curve** and the **long run supply curve** for an individual firm
	1. Hint: think ATC & AVC Make sure you mention the terms **SHUTDOWN** & **EXIT** in your analysis

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1. Discuss the difference between the **long run supply curve** of the entire competitive MARKET vs. **long run supply curve** for an individual curve. (from question 12)
	1. Hint: firms in the long run must produce at minimum of ATC. (see market graph below)

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1. Modify the graphs above for the impact of a **short run decrease in demand**
	1. Find a new market equilibrium (label point either E1 & E2 or A & B)
	2. Explain why this new equilibrium will not last in the long run in a competitive market
	3. Explain what would likely occur in the long run to secure a new long run equilibrium

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