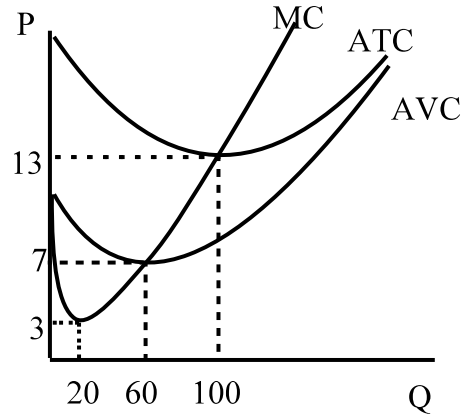


Write your name on the cover of the test booklet and nowhere else. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 14-point question should take 7 minutes. I cannot give extra time because the other section did not get any.

1) (10 points) Answer EITHER Part A OR Part B.

A) Use the graph to the right to answer this part. What is the minimum price this company will still produce goods at? What is the minimum price which will cause this firm to not lose money? Explain your logic to both questions.

B) How are perfect competition and monopolistic competition similar and how are they different?



2) (12 points) Answer EITHER Part A OR Part B.

A) Draw the  $TP_L$  diagram and explain why it takes that shape.

B) Suppose the table on the lower-right represents the production function of a firm. If they are profit maximizing, then how much should they produce if the wage rate is \$30/L and the price of the good is \$5/Q? Explain your logic.

| L | Q  | $MP_L$ | $AP_L$ |
|---|----|--------|--------|
| 1 | 10 | 10     | 10     |
| 2 | 16 | 6      | 8      |
| 3 | 21 | 5      | 7      |
| 4 | 24 | 3      | 6      |

3) (14 points) Answer EITHER Part A OR Part B.

A) Draw the short-run industry supply and demand curves for a perfectly competitive industry in the USA. Place the world price at a level which we will be importing the good. Illustrate an appreciation of the US\$ on the graph. Briefly explain why the curve(s) moved as drawn and explain how you can tell we were importing the good.

B) Suppose the firm is producing 1000 items and sells them for \$5/unit. If the AVC is \$3/unit, and the TFC is \$1500, what are the break-even output and the DOL? Show all work.

4) (18 points) Answer EITHER Part A OR Part B.

A) Illustrate on the TC/TR diagram of the break-even analysis, an increase in the rent of the office building. Assume the size of the building is unchanged. Explain why the curve(s) moved as drawn. Will the firm's break-even point be at a smaller, larger, or same quantity as before? What is the economic reason for this?

B) Suppose there are two firms in the same industry, so they face the same selling price of their goods. The two firms have different fixed costs, but the same profits and same level of production. Draw the two firms' TC/TR diagram for the break-even analysis. Explain why the curves are drawn as you drew them. Which firm is riskier? How can you tell?

5) (20 points) Draw an SRMC/SRAVC/SRATC/D/MR diagram for a perfectly competitive firm which is making profits. Draw the profits on that diagram. Explain how you found the profits.

6) (26 points) Illustrate EITHER the event in Part A OR the event in Part B on the SRMC/SRAVC/SRATC/AFC diagram. Explain why the curve(s) moved as drawn.

A) The cost of electricity increases.

B) The winter was colder than normal.