Lab 8 – Perfect Competition

Perfect Competition Requires

1. Many sellers and many buyers
2. Products are homogenous
3. Each firm has a very small market share of total sales
4. Firms are price takers
5. All resources are mobile and available for every firm
6. Freedom of entry and exit

Demand Curve in Perfectly Competitive Market

1. A demand curve faced by a single firm is perfectly elastic. This corresponds to the price set by the market:

2. A firm's marginal revenue will always equal the price of its next unit. P = MR = D

Profit Maximization in the Short Run

1. A firm's sole goal is to maximize profits. Remember Profits = TR – TC

2. How do we find the maximum point? (Hint: think calculus)

3. Total Profit =

4. As long as the market price is higher than a firm's AVC, the firm will continue to operate. When the market price falls below a firm's AVC curve, the firm will shutdown to minimize the losses

Short Run Supply Curve

1. For a Firm:
    a. Short run supply curve slopes upward because firm's MC tends to increase as output is increased

    b. Remember, a firm shuts down when price is below AVC. How can we demonstrate the supply curve of a firm graphically?

2. For the Market
    a. A market supply curve gives the sum of the quantities supplied by all firms producing a product at each possible price over a given period

    b. Graphically, this is a horizontal summation of the marginal cost curve of all firms

Long Run Supply

1. In the long run, firms have diminished ability to make profits. This is because the opportunity to make profits in the short run eventually brings so many firms into the market that the market price is driven down to a minimum level (market supply shifts out). The minimum level that the market price reaches corresponds to the minimum average cost faced by the individual firms in the market. Once the market price reaches this level, firms no longer have any incentive to enter the market, and therefore the force which drove the price down (firms entering the market) dwindles as well.

2. In the long run, economic profits are zero. Profit = (P – LRAC)*Q

3. When a market reaches equilibrium in the long run, firms have no incentive to leave or enter the market. And even though economic profits are zero, firms have minimized their opportunity cost – their choice to operate is the optimal decision they can make, no better alternative exists

Problems

Use the table for questions 1-4:

Output	AVC	AC	MC
1	24	84	24
2	18	48	12
3	14	34	6
4	16	31	22
5	18	30	26
6	22	32	42

1. If the market price is $42, the firm will make _____ units of output and have a total economic profit of $_____
2. What is the total FC for this firm?
3. At a market price of $22, what would the firm do in the short run and why?
4. At a market price of $6, what would the firm do in the short run and why?
5. What is the firms supply curve in the short run?
6. What distinguishes the short run from the long run?
7. If firms in an industry are making economic profits in the short run, why can't they continue to make profits in the long run?
8. How do you know when an industry has reached long run equilibrium?