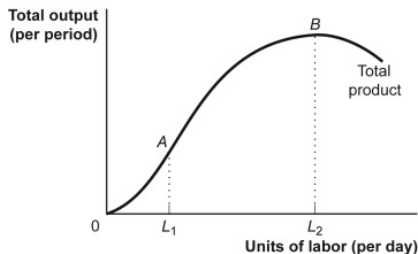


CH-310-A Microeconomics - Theory and Policy

Chapter 11 of Krugman and Wells

Chapter 11

Total product



Between points A and B the marginal product of labor is: (a) increasing (b) zero (c) falling (d) infinite

Total product (previous graph)

Units of labor added after L1 and up to L2 are:

- (a) subject to diminishing marginal returns.
- (b) adding increasing amounts to total product.
- (c) adding positive amounts to total product.
- (d) adding positive amounts to total product and are subject to diminishing marginal returns.

Fixed costs

Oscar has negotiated a lease for his sporting goods store in which he is required to pay \$2,500 per month in rent. Oscar pays his staff \$9 per hour to sell sporting goods and his monthly electricity bill averages \$700, depending on his total hours of operation. Oscar's fixed costs of production equal:

- (a) \$2,500 per month.
- (b) \$3,200 per month.
- (c) \$9 per hour multiplied by total hours of work plus \$700.
- (d) \$9 per hour multiplied by total hours of work plus \$3,200.

Marginal costs

Austin's total fixed cost is \$3,600. Austin employs 20 workers and pays each worker \$60. The average product of labor is 30, and the marginal product of the twentieth worker is 12. What is the marginal cost of the last unit produced by the last worker Austin hired?

Marginal cost

Suppose the marginal cost curve in the short run first decreases, then reaches a minimum, and then increases. If we are at an output where marginal cost is decreasing, then:

- (a) marginal product must be increasing.
- (b) average variable cost must be decreasing.
- (c) average total cost must be increasing.
- (d) marginal product must be increasing and average variable cost must be decreasing.

Textbooks

Table: Marie's Textbook Company

Quantity of Labor (workers)	Quantity of Textbooks
0	0
1	20
2	80
3	130
4	170
5	200
6	220

Marie has a small publishing company that produces textbooks. She has fixed costs of \$500 per month and hires workers for \$2,000 per month. The table shows Marie's monthly production function. With as much precision as possible, calculate the following: a) total cost of production when four workers are employed b) the output level that produces the lowest average total cost c) the price that Marie must charge in order to break even on the production of 130 textbooks.