

Chapter 13-Costs of Production

1. The goal of firms is to maximize profit, which equals total revenue minus total cost. Total costs include implicit and explicit costs.
2. When analyzing a firm's behavior, it is important to include all the opportunity costs of production. Some of the opportunity costs, such as the wages a firm pays its workers, are explicit. Other opportunity costs, such as the wages the firm owner gives up by working in the firm rather than taking another job, are implicit.
3. In the short run, the law of diminishing marginal returns governs a firm's production and costs. A firm's marginal product curve decreases, while a firm's marginal cost curve increases in the short run. Know the formula of Marginal Product.
4. A firm's total costs can be divided between fixed and variable costs. Fixed costs are costs that do not change when the firm alters the quantity of output produced. Variable costs are costs that do change when the firm alters the quantity of output produced.

5. From a firm's total cost, two related measures of cost are derived. Average total cost is total cost divided by output. You need to know Average Variable Costs and Average Fixed Costs as well. Marginal cost is the amount by which total cost would rise if output were increased by one unit. Know the formulas of each of these cost measures.

6. When analyzing firm behavior, it is often useful to graph Average Total Cost and Marginal Cost. Remember that average numbers always follow marginal numbers. For a typical firm, marginal cost rises with the quantity of output. Average total cost first falls as output increases and then rises as output increases further. The Marginal Cost curve always crosses the Average Total Cost curve at the minimum of the Average Total Cost curve.

7. A firm's costs often depend on the time horizon being considered. In the short run, some costs are fixed while others are variable. In the long run, all costs are variable. A firm experiences economies of scale as costs decrease in the long run. Similarly, a firm experience diseconomies of scale as costs increase in the long run.

8. Important graphs to know: Figure 13-1, 13-4, 13-6, 13-7.

