Law of Returns to Scale

by

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Return to Scale

- The scale of production in the context of two factor production function means a *given amount of labour and capital* used in the production process. The proportionate changes in both the factors bring about a change in the scale. Thus, ***an increase in the scale means that all inputs or factors used in a production process are increased in the same proportion.*** Increase in the scale thus occurs when all factors or inputs are increased keeping factor proportion unaltered.

- Constant Return to Scale: If we increase all factors (*i.e.*, scale) in a given proportion and the output increases in the same proportion, returns to scale are said to be constant. Thus, if a doubling or trebling of all factors causes a doubling or trebling of output respectively, returns to scale are constant.
- Increasing Return to Scale: if the increase in all factors leads to a more than proportionate increase in output, returns to scale are said to be increasing. Thus, if all factors are doubled and output increases by more than a double, then returns to scale are increasing.
- Decreasing Return to Scale: if increase in all factors leads to a less than proportionate increase in output, returns to scale are decreasing.

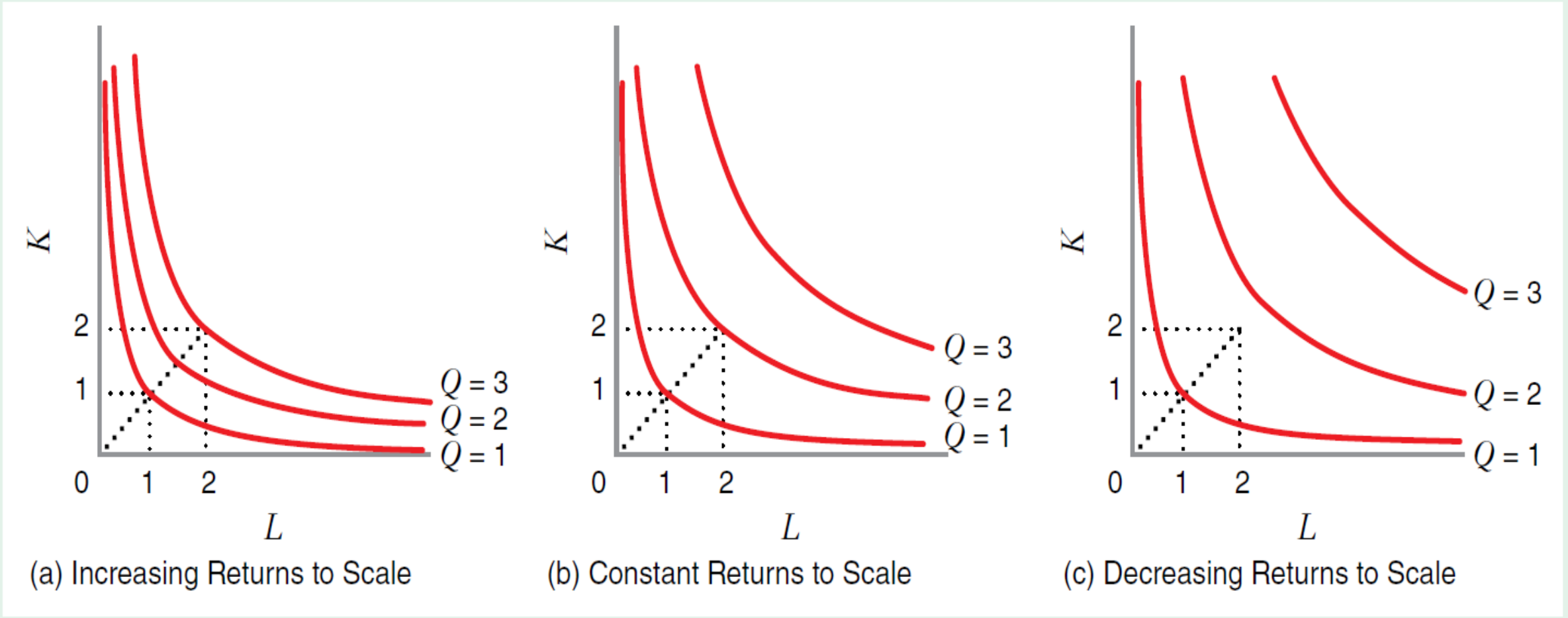

FIGURE 6.18 **Increasing, Constant, and Decreasing Returns to Scale**
In panel (a), doubling the quantities of capital and labor more than doubles output. In panel (b), doubling the quantities of capital and labor exactly doubles output. In panel (c), doubling the quantities of capital and labor less than doubles output.