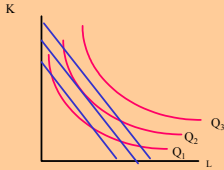
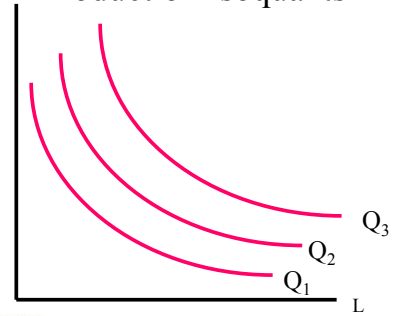


Cost Function Basics

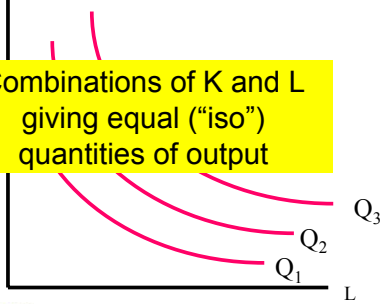


Production Isoquants

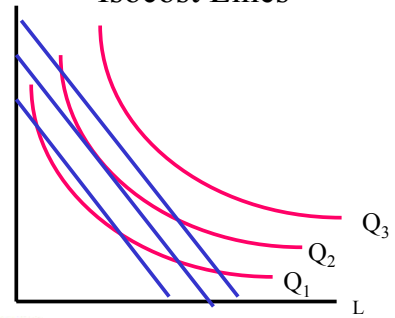


Production Isoquants

Combinations of K and L giving equal ("iso") quantities of output

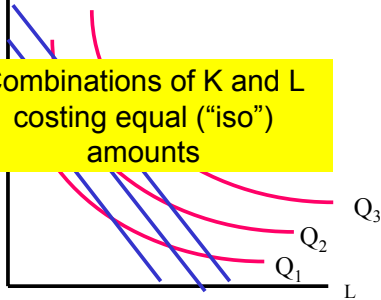


Isocost Lines



Isocost Lines

Combinations of K and L costing equal ("iso") amounts

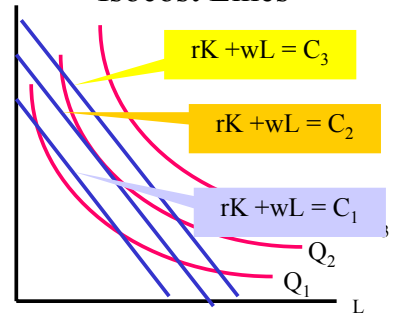


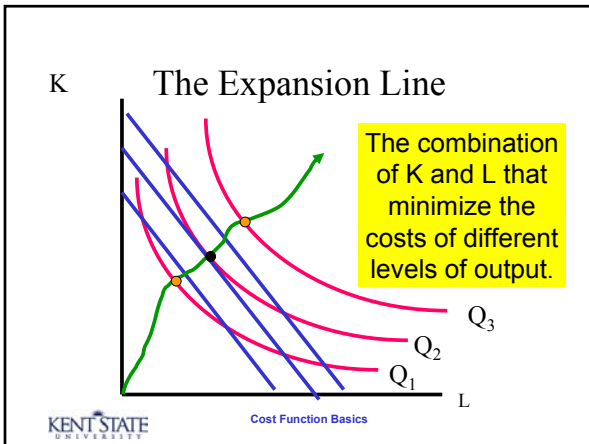
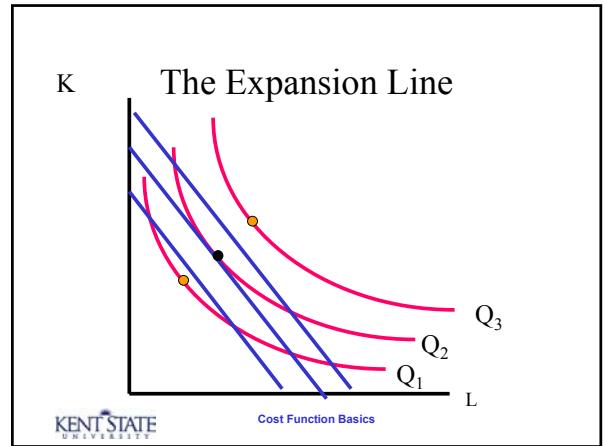
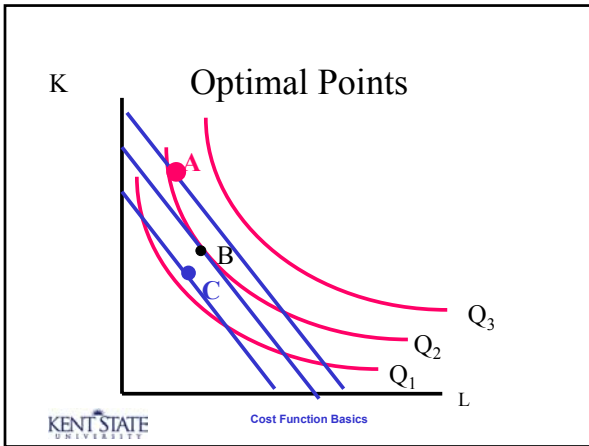
Isocost Lines

$$rK + wL = C_3$$

$$rK + wL = C_2$$

$$rK + wL = C_1$$





Our Basic Cost Function

- Cost is a function of output and factor prices

$$C = C(q, r, w)$$

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Our Basic Cost Function

- Cost is a function of output and factor prices

$$C = C(q, r, w)$$

- We often simplify this to

$$C = C(q)$$

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Our Basic Cost Function

- Cost is a function of output and factor prices

A caution: we always assume we are finding the least cost way of producing q .

- We often

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Other Measures of Cost

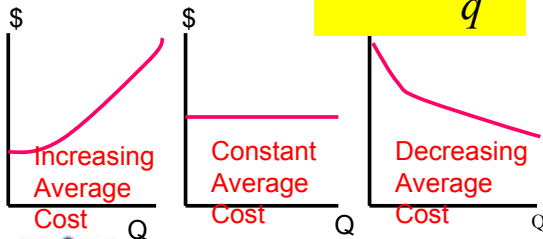
- Average Cost
 - Total Cost divided by quantity
- Marginal Cost
 - The incremental cost of another unit

Average Cost

$$AC = \frac{C(q)}{q}$$

Average Cost

$$AC = \frac{C(q)}{q}$$



Marginal Cost

$$MC(q) = C'(q) = \frac{dC}{dq}$$

Marginal Cost

$$MC(q) = C'(q) = \frac{dC}{dq}$$

$$MC(q) = C(q) - C(q-1)$$

End

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