

# A Comparative Advantage Model in a Neoclassical World

# A Two-Input Economy: A Neoclassical Model

- A production function with two inputs: capital and labor
- Capital and labor are imperfectly substitutable: an increasing cost production function
- Isoquants
- Isocosts
- How does each firm decide on the mix of inputs: the profit maximizing rule

# A production function:

$Q = f(K, L)$ ; given  $K$ , as  $L$  increases  $Q$  will increase;  
given  $L$ , as  $K$  increases  $Q$  will increase

Capital,  $K$ , and Labor,  $L$ , are to some extent substitutable  
Both  $K$  and  $L$  are subject to decreasing returns.

## **Special cases:**

Fixed-proportions production functions  
Perfectly substitutable inputs