Allocating output between two different plants

- A manufacturer has two different plants, A and B.
- He wants to produce $q^*$. 
- How should he allocate the production between the two plants?

The two AC and MC functions

- Plant A
- Plant B

Optimizing Production

Graph MC of plant A in the usual fashion

But graph MC of plant B relative to the right axis
Applications of Cost Functions

Optimizing Production

Set output where $MC_A = MC_B$

Wrong Answers

Use plant with lower AC
Use plant with lower MC

New Plants

Plant A-Old Design
Plant B-New Design

New Plants
The Moral of the Story

- $MC_A = MC_B$

End