

Advanced Placement Human Geography

- VI. Industrialization and Economic Development
 - B. Growth and diffusion of industrialization
 - 4. Geographic critiques of models of economic localization

... Applying Weber's Industrial Location Theory

In this activity you will apply the basic principles of Weber's Location Theory to determine the best location for an industrial processing plant. The activity focuses on the transportation costs involved in delivering raw materials to the factory and the finished product to the market. Factors other than transportation may also be taken into account, but only after the basic cost analysis has been performed.

1. Use the diagram and the information below to complete the location cost charts.
 - a) Complete Chart 1 by calculating the transport cost at each *isotim* (circular lines drawn at one-mile intervals) for Resource 1, Resource 2, and the Market.
 - b) Complete Chart 2 by calculating the total transport cost at each of the twelve potential plant locations.
2. Based on your transport cost calculations, which site is most cost effective for locating an industrial processing plant?
3. Identify and briefly justify four additional factors that might result in the developer's deciding to locate the new processing plant at site 8 instead.

Material Quantities and Transport Rates

<u>Location</u>	<u>Symbol</u>	<u>Amount Shipped</u>	<u>Transport Rate</u>
Raw Material #1	R1	6 tons	\$5/ton-mile
Raw Material #2	R2	7 tons	\$5/ton-mile
Market	M	10 tons	\$7/ton-mile

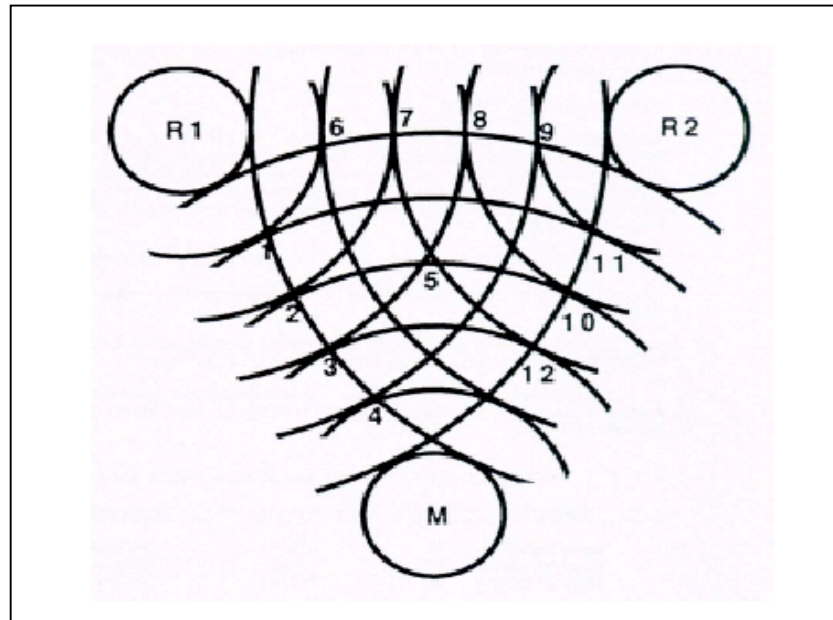


Chart 1. Transport Costs for Raw Materials or Finished Product/Mile

	Mile 1	Mile 2	Mile 3	Mile 4	Mile 5
R1					
R2					
M					

Chart 2. Total Transport Cost for Each Proposed Plant Site

Site	R1	R2	M	Total Cost
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

