Von Thunen’s Model of Agricultural Land Use
Von Thunen Model:

- The first location theory
- A concentric model

- Central City
- 1 Intensive farming and dairying
- 2 Forest
- 3 Increasing extensive field crops
- 4 Ranching, animal products
Contains six assumptions

1. There is only one market available, self-sufficient with no outside influence.

2. All farmers are market oriented, producing goods for sale. (Not subsistence.)

3. The physical environment is uniform; there are no rivers or mountains.

4. All points at equal distances from the market have equal access to the market.

5. All farmers act to maximize profits.

6. The dietary preferences of the population are those of Germanic Europeans.
Land rent

• The main concept is land rent or land value, which will **decrease** as one gets farther away from central markets.

• **Rent is highest in the closest proximity to urban markets.** *(Bid-Rent Theory)*

• Thus, agricultural products that have intensive land use, have high transportation costs and were in great demand would be located close to urban markets.
Major concepts:

- Distance from the city
- Preservation of food
- Amount of space
So………..

1. Dairying and gardening of fruits and vegetables would be closer to the urban market while…

2. Timber and firewood for fuel and building materials would be in the second zone.

3. Mixed farming, commercial grain and orchards.

4. Extensive cattle ranching would be located farther away. Transportation is cheap: the animals can walk to the city for butchering.
Some products spoiled more quickly, needed more sensitive transportation, or generate higher prices at market. These products mean the farmer can afford higher land rent.
It doesn’t always look the same:
Inference of Von Thunen’s Model to Continental United States

Assumptions
1. New York City the only market
2. Crops ranked by rent paying ability
3. No terrain or climatic variation

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1. New York City the only market
2. Crops ranked by rent paying ability
3. No terrain variation
4. Climatic variation considered