

Fundamentals of GIS



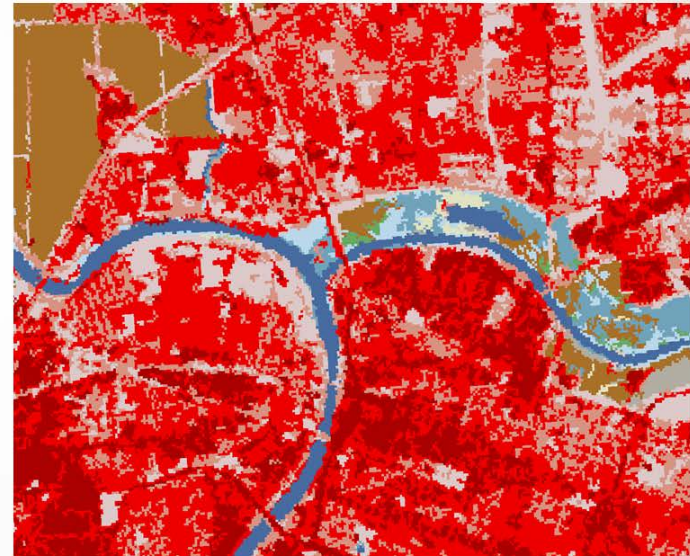
Data Representation in GIS

Data Representation

Real World



GIS Approximation



Data Representation

Person



Contacts Manager
Approximation



Phone Number

E-Mail Address

Physical Address

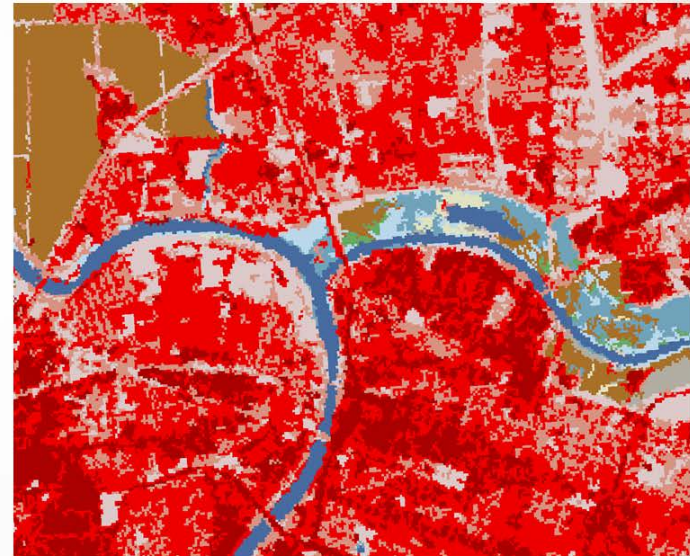
Notes

Data Representation

Real World



GIS Approximation



Vector and Feature Data

Points, Lines, and Polygons

Points:

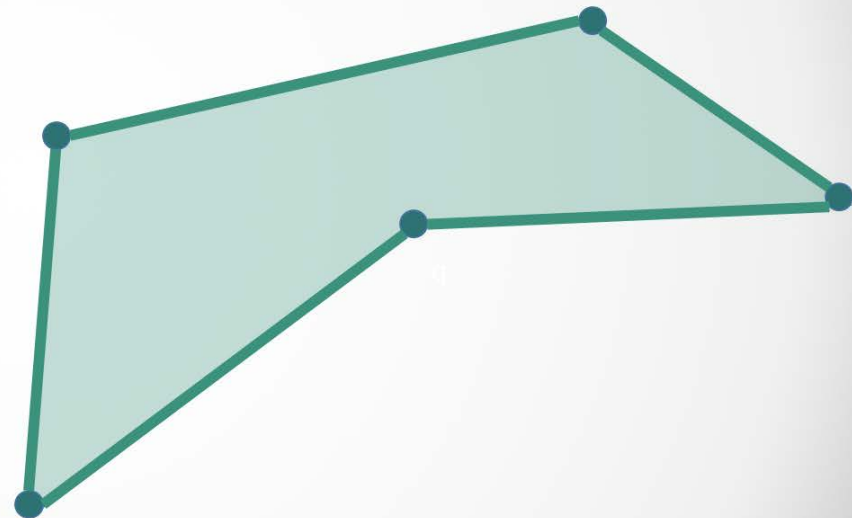
- Dimensionless, location in space
- Symbol Determines Display Data

Lines:

- One Dimension

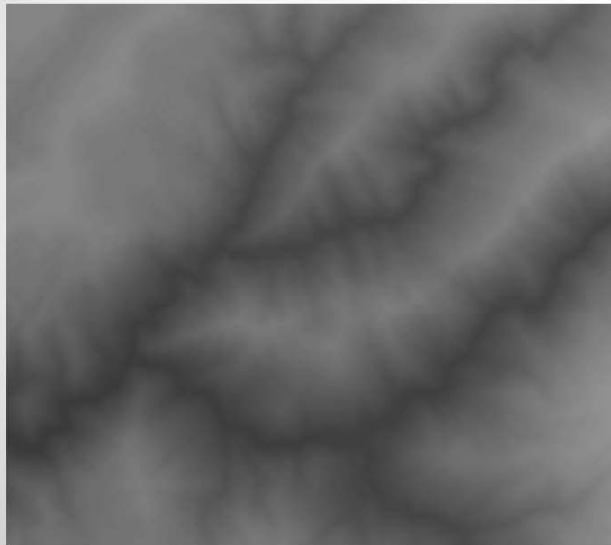
Polygons:

- Two Dimensions
- Used to group locations that are the same type



Raster Data

Grid of Fixed-Size Pixels



Part of a *digital elevation model*
from National Elevation Dataset

5	6	4
8	9	3
7	4	7