

Spatial relationships in vector system

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1. Point-point

- “is within”: Find all the customer points within 1 km of this retail store point
- “is nearest to”: Find the hazardous waste site which is nearest to this groundwater well

2. Point-line

- “ends at”: Find the intersection at the end of this street
- “is nearest to”: Find the road nearest to this aircraft crash site

3. Point-area

- “is contained in”: Find all the customer located within this post code
- “can be seen from”: Determine if any of this lake can be seen from this viewpoint

4. Line-line

- “crosses”: Determine if this road crosses this river
- “comes within”: Find all the roads which come within 1 km of this railroad
- “flows into”: Find out if this stream flows into this river

5. Line-area

- “crosses”: Find all of the soil types crossed by this proposed railway
- “borders”: Find out if this road forms part of the boundary of this airfield

6. Area-area

- “overlaps”: Identify overlaps between types of soil on map A and types of land on map B
- “is nearest to”: Find the nearest lake to this forest fire
- “is adjacent to”: Find out if these two areas share a common boundary