**Intersect** – Computes a geometric intersection of the Input Features. Features or portions of features which overlap in all layers and/or feature classes will be written to the Output Feature Class. *(Also see Intersect or Merge)*

Where do I Find it?

- Open ArcToolbox
- Analysis Toolbox – Overlay Toolset – Intersect
Parameters:

**Input Features** – A list of the input feature classes or layers.

* The ranks is generally doesn’t have to be addressed. This has to do with cluster distances. For more info see help.

**Output Feature Class** – The feature class to which the results will be written

**Join Attributes** – Determines which attributes from the Input Features will be transferred to the Output Feature Class

- **ALL** – all the attributes from the Input Features will be transferred to the Output Feature Class. This is the default
- **NO_FID** – All the attributes except the FID from the Input Features will be transferred to the Output Feature Class.
- **ONLY_FID** – Only the FID field from the Input Features will be transferred to the Output Feature Class.

**XY Tolerance** – The minimum distance separating all feature coordinates (nodes and vertices) as well as the distance a coordinate can move in X or Y (or both)

* Generally things are fine if you leave the default.

**Output Type** – Choose what type of intersection you want to find.

- **INPUT** – The intersections returned will be the same geometry type as the Input Features with the lowest dimension of geometry of the inputs (polygon is the highest, then line, and finally point).
- **LINE** – Line intersections will be returned. This is only valid if there are no point inputs.
- **POINT** – Point intersections will be returned. If the inputs are line or polygon, the output will be a multipoint feature class.

**Hints:**

If the input s have different geometries then the output can’t have a type of a higher dimension then the lowest input.

If you are using ArcView or ArcEditor license, you are limited to combining 2 layers at a time.