Finding the Rotation Angle for each Polygon in a Feature Class

In the ArcToolbox, go to Data Management Tools>Features>Minimum Bounding Geometry. (See image below) Input: <Polygon feature class in which you want to determine the rotation angle> Output: Save as feature class in file geodatabase anywhere you like. Geometry Type: RECTANGLE_BY_WIDTH Group Option: NONE Group Field(s) (Optional): Do not check anything on. CHECK Add geometry characteristics as attributes to output which is below the Group Field list.

The output feature class will have an attribute called **MBG_Orientation**. This would be the rotation angle if you want all the maps in a series to be **Portrait**. If you need the Landscape rotation angle, **Add** a field called **Landscape** and make it type **Float**. Use the **Field Calculator** to find the landscape angle with **MBG_Orientation – 90**.

Join the output table with the new fields to the original layer and use the MBG_Orientation or Landscape field as the Rotation Field.

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| Feature To Line | | | Unchecked—Omits the geometric attributes in the output |
| Feature To Point | Group Option (optional) | | feature class. This is the default. |
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