Name:	Date:	Period:

Lab13: Hough Transform

- Attach a code printout.
- Attach a PGM image showing pixelated bin counts where darker indicates more votes.
- Given...
  - A set of edge points.
  - The unrounded angle normal to the edge at each point.
- At each edge point...
  - Loop over all interior points in the direction normal to the edge.
  - At each point hit by this marching process increment a counter by one.
  - Only round on the pixel/bin location, not the angle.
- If there is a circle...
  - Pixels near the center will have relatively high counts.
  - Identify this center by a clustering algorithm such as k-means.
  - Or, choose a large enough bin that total count alone will suffice.
- To determine the radius...
  - Perform a statistical analysis on the distribution of distances to those edge points who "voted" for the identified-as-center bin.
  - Tricky, concentric circles.

Official Use Only

Header:	Name	Correct Date	Program Description
Style:	Comments	Variable Names	Modular
Data Structures:	Obvious	General	Lean
Algorithm:	Clear	Correct	Efficient
Scoring:	Raw _____	Late _____	Total _____