## 2D Curve & Text Clipping

## Curve Clipping

- approximate with polygons/lines and use line/poly. clipping
- Compute intersections of non-linear equations
  - quick reject: use bounding box intersection tests
  - use symmetry of curve to improve quick rejection
  - when must compute non-linear intersections save results for use by scan-line algorithm



## Text Clipping

- Text as lines/polygons clip lines/polygons
- Text as bitmaps: clip extents of rectangular bitmap to clip window (often part of hardware bitblt operation)
- For efficiency add levels of quick reject/accepts:
  - test bounding rectangle of string against clip window
  - test bounding rectangle of individual characters against clip window



## **Revisions**

- 1.1 synchronized Liang-Barsky notation with textbook
- 1.2 typo on slide 36
- 1.3 typos