## Instructions for Drawing point-wise and line-wise conics

(It may be best to give the line-wise instructions to the students, and then have them figure out the dual process.)

## Line-wise Conic

- 1) Find 20 points on line x.
- 2) From each one of these 20 points on x, draw a line passing through P.
- 3) With each one of these 20 lines on p, find where it intersects with line  $\ell$ .
- 4) From each one of these 20 points on  $\ell$ , draw a line passing through Q.
- 5) With each one of these 20 lines on Q, find where it intersects with line y.
- 6) Draw the 20 connecting lines from each point on x to its corresponding point on y.

## Point-wise Conic

- 1) Draw 20 lines on point X.
- 2) With each one of these 20 lines on X, find where it intersects with line p.
- From each one of these 20 points on p, draw a line passing through L.
- 4) With each one of these 20 lines on L, find where it intersects with line q.
- 5) From each one of these 20 points on q, draw a line passing through Y.
- 6) Find the 20 connecting points by finding the points of intersection of each line on X and its corresponding line on Y.