

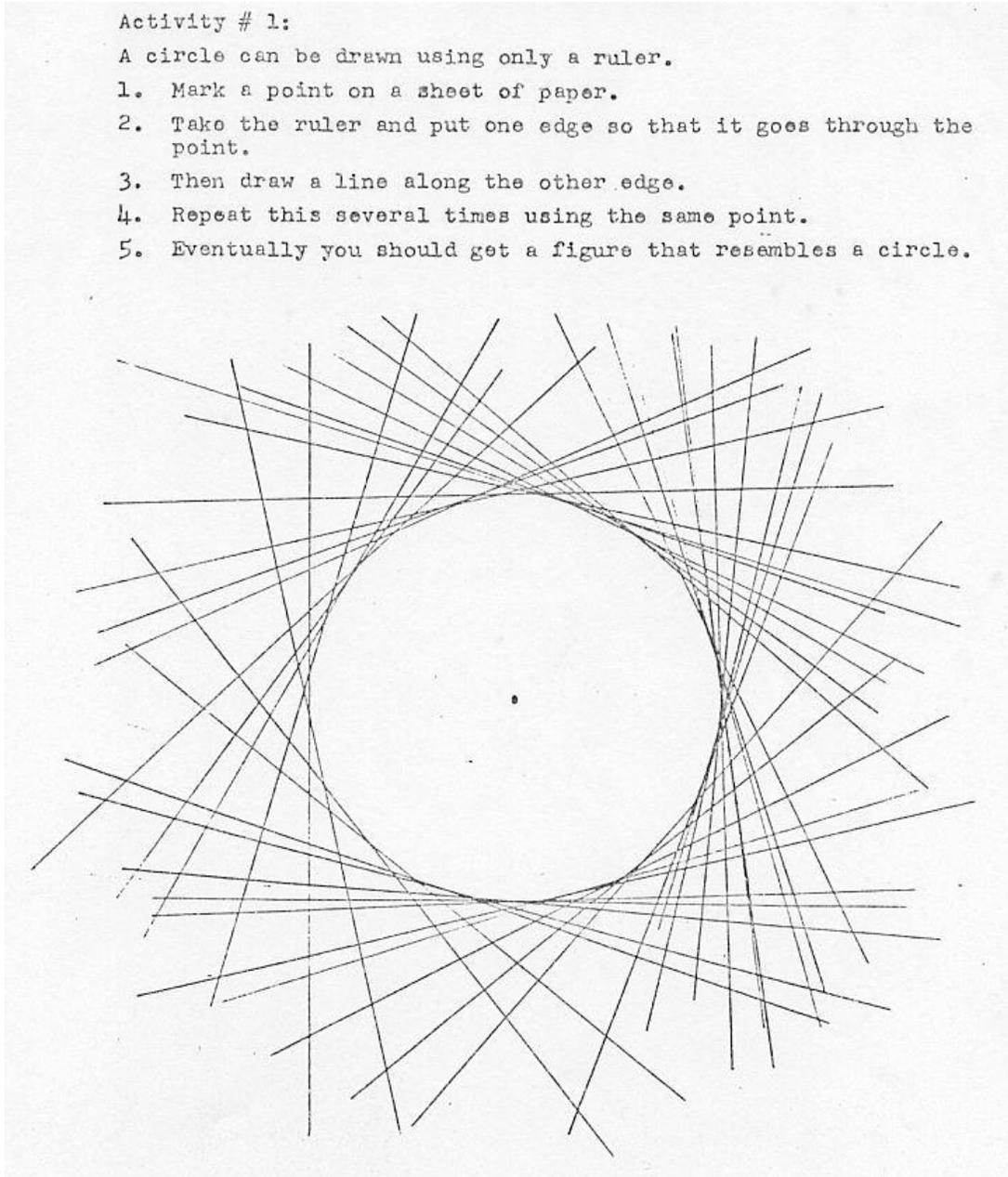
## Activities with Circles and Parabolas

by Katie Blackburn, E.T.S.U.

### Activity # 1:

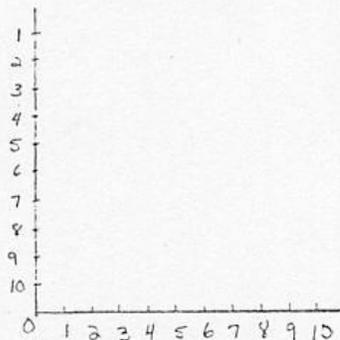
A circle can be drawn using only a ruler.

1. Mark a point on a sheet of paper.
2. Take the ruler and put one edge so that it goes through the point.
3. Then draw a line along the other edge.
4. Repeat this several times using the same point.
5. Eventually you should get a figure that resembles a circle.



Activity # 3:

On the graph below, connect 10 to 10, 9 to 9, 8 to 8, etc.  
The curve you have made is a parabola.



Activity # 4:

1. Take a sheet of unlined paper.
2. Mark a point on it about one inch above the center of the lower edge.
3. Fold the paper and make a sharp crease so that the lower edge falls along the point.



4. Open the paper flat and fold again at a different angle, being careful that the lower edge again comes to the marked point.
5. Repeat this about 20 times, folding the paper in a different direction each time.
6. A parabola should appear.
7. Trace it with your pencil.
8. The marked point is its focus.

It should look like this:

