Drawing for Problem 4 on Examination 1 Mathematics 145B, Spring 2017

In the fragment of the coordinate plane drawn below, the union of the two shaded solid angle interiors (with their edges included) is a cone in the sense of the problem's definition. The homotopy from the identity to the constant map (sending everything to the origin 0) moves each point p in the cone to the origin along the straight line segment joining p to 0. The cone extends indefinitely in every direction.

