



A diagram illustrating a region in the plane. A dashed curve, concave to the left, separates a shaded region on the right from an unshaded region on the left. The shaded region is filled with a light gray color. Two points are marked on the dashed curve: one at the lower left, labeled $(x_0, 0)$ and 'critical', and another at the upper right, labeled 'ordinary'. The background is white, and the dashed curve is black.

$(x_0, 0)$ • critical

• ordinary