

1. For each of the problems below, say whether you expect the given vector field to have positive, negative, or zero circulation *counterclockwise* around the closed curve C in the figure shown at the right. Two of the segments of C are circular arcs centered at the origin; the other two are radial line segments. You may find it helpful to sketch the vector field.

(a) $\vec{G} = x \hat{i} + y \hat{j}$

(b) $\vec{H} = y \hat{i} - x \hat{j}$

