

1. Show that a configuration of four points on a circle are not generic, whereas three points on a circle can be a generic configuration.
2. Show that a bar simplex is infinitesimally rigid in any dimension.
3. Let $G(\mathbf{p})$ be a bar framework obtained by replacing all the struts and cables of a Cauchy polygon by bars. Show that $G(\mathbf{p})$ is infinitesimally *redundantly rigid*. In other words $G(\mathbf{p})$ is infinitesimally rigid even after the removal of any bar.
4. Show that the following bar framework is globally rigid, but not infinitesimally rigid in the plane. The three red bars lie on lines that meet at a point.

