

## RELATIVE GEOMETRIC INEQUALITIES FOR COMPACT, CONVEX SURFACES

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*Abstract.* We obtain relative geometric inequalities for compact, convex surfaces. In particular, we present several inequalities comparing the relative area and the relative perimeter with the maximal and minimal relative diameter. Besides considering the general problem we also consider particular cases where we can obtain sharper results: 1) the so called fencing problems in which only subdivisions into two regions of the same area are considered, 2) the subdivisions obtained by planar cuts.

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