

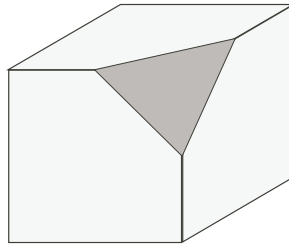


Problem of the Week

Grade 11 and 12

Cutting Corners

A cube with side lengths 4 cm is to be cut in the following manner: the corner of the cube is removed by making a cut through the midpoints of three adjacent sides. The diagram shows the resulting figure after the first cut.



Similar cuts are made at each of the remaining corners of the cube.

Determine the increase or decrease in total surface area as a result of slicing the eight corners off the original cube.

