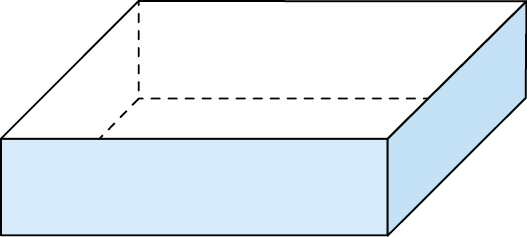
5 Calculus

**Activity: What is optimization?   
(Student version)**

Question

An open-topped box is formed by cutting congruent squares from the corners of a square piece of cardboard and turning up the edges. Before any alterations, the piece of cardboard has an area of 1 m2.



Assuming you want the volume of the box to be the maximum it can possibly be, what size should the squares cut from each corner of the cardboard be?