

Name:

Section: 5 6

A box with a square base is to be constructed out of cardboard. For strength, the base of the box has two layers of cardboard. We are required to build a box with a volume of 100 in^3 . What are the dimensions of the box that uses the least amount of material?

A box with a square base is to be constructed out of cardboard. For strength, the base of the box has two layers of cardboard. We only have 100 in^2 of cardboard. What are the dimensions of the box with the greatest volume?