# Challenge Problems 

Module 13 Perimeter, Area, and Volume
Lesson 7 Volume: Pyramids and Cones

## Set 1

(1) Explain how you can find the radius of a cone with a volume of 942 cubic inches and a height of nine inches.

Explain what happens to a cone's volume when its radius is doubled but its height remains the same.
(3) Explain what happens to a cone's volume when its height is doubled but its radius remains the same.

## Set 2

Create a square pyramid with the same height and volume as the rectangular pyramid shown here. Explain how you created it.


Luria is designing storage areas for her out-of-season clothing. Which design has greater volume, A or B? How much greater?


## Additional Work Area

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