

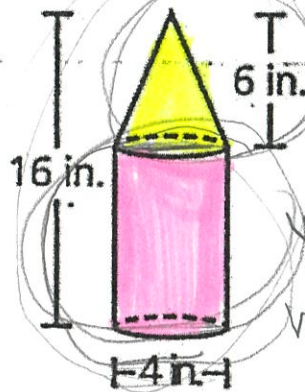
Name Key
 Mrs. Roubos

Date _____
 Period _____

Do Now:

A toy tower is made from a cone placed directly on top of a cylinder as shown below.

Part A: What is the total volume, in cubic inches, of the tower? Leave your answer in terms of π .



$$\frac{16}{4} = 10$$

Cone	Cylinder
$V = \frac{1}{3} \pi r^2 h$	$V = \pi r^2 h$
$V = \frac{1}{3} \cdot \pi \cdot (2)^2 \cdot 6$	$V = \pi \cdot (2)^2 \cdot 10$
$V = \frac{1}{3} \cdot \pi \cdot (4) \cdot 6$	$V = \pi \cdot 4 \cdot 10$
$V = 8\pi$	$V = 40\pi$
$\begin{array}{r} 8\pi \\ + 40\pi \\ \hline 48\pi \end{array}$	

Part B: Explain how you found your answer.

I found the volume of both
 the cone and cylinder (in terms of π)
 and added them together