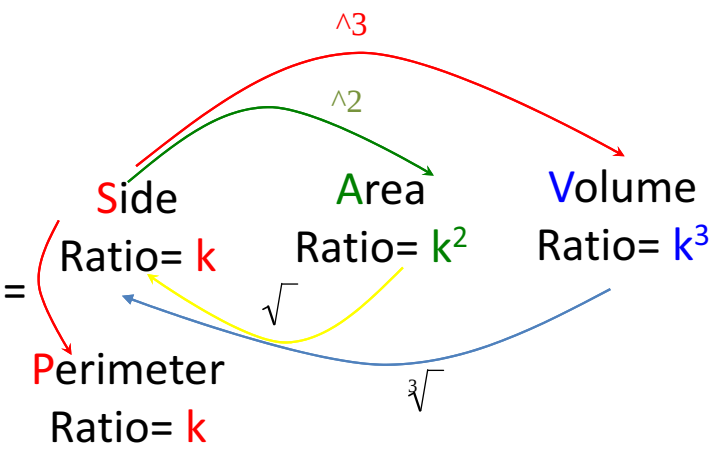


L4 Ratios of similar solids

k	k ²	k ³
2		
	25	
		27
$\frac{2}{7}$		
	$\frac{9}{4}$	
		$\frac{8}{27}$



To solve a similar figure problem:

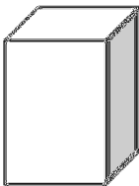
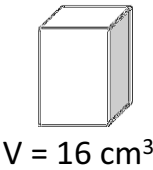
- First step is: find k then find k² and/or k³
- to find a missing side/Area/Volume, write the ratios and cross multiply:

K (sides)	k ² (areas)	k ³ (volumes)

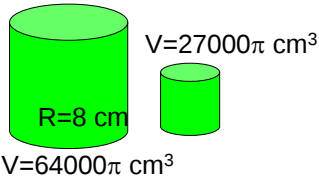
- $\frac{\text{New side}}{\text{Old side}} = k$
- Note:** Keep the image always on top in your ratios*
- * if you don't know which is image, putting the bigger one on top might simplify your calculations.

Ex 1: find the volume of the bigger prism

$K = \frac{3}{2}$



Ex 2: Determine the area of the base of the small cylinder if the two cylinders are similar.



Practice:
6.3 # 4-6, 10-15

