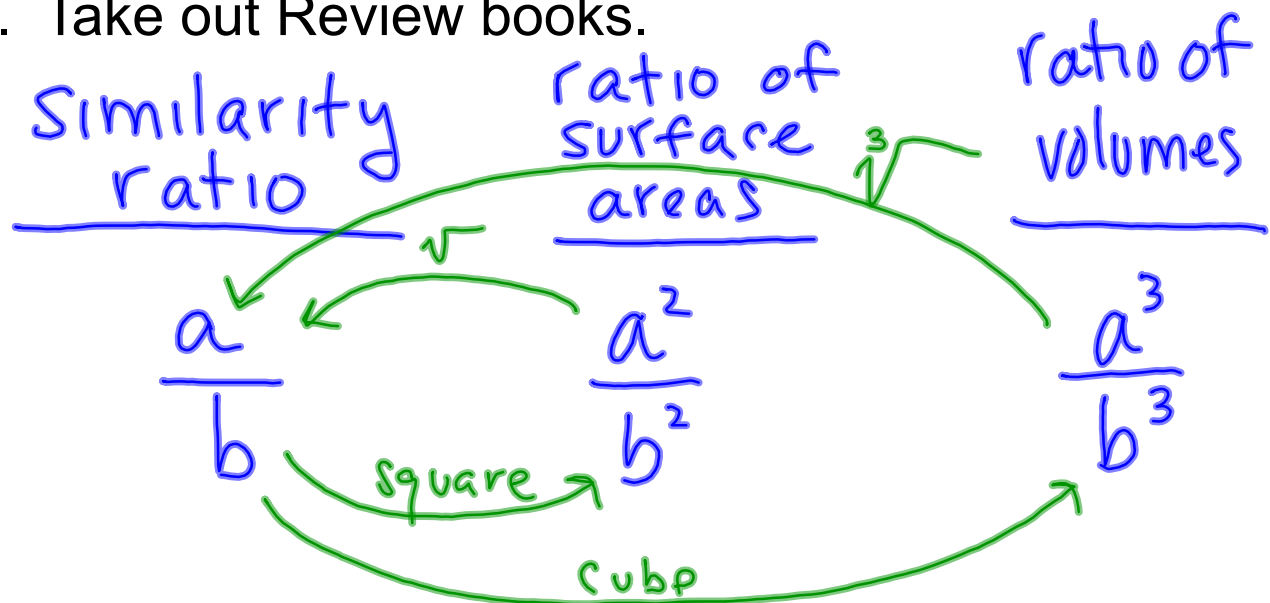


Do-now:

1. Turn in HW Handout #2.
2. Take out Review books.

5 inches  
 $5 \text{ in.}^2$   
 $5 \text{ in.}^3$



If the ratio of the volumes of two similar solids is 64:729, what is their similarity ratio?

$$\frac{\sqrt[3]{64}}{\sqrt[3]{729}} = \left( \frac{4}{9} \right) \text{ similarity ratio}$$

The ratio of the volumes of two similar figures is 27:729.  
What is the ratio of their surface areas?

$$\frac{\sqrt[3]{27}}{\sqrt[3]{729}} = \frac{3}{9} = \left(\frac{1}{3}\right) \text{ similarity ratio}$$

$$\frac{1^2}{3^2} = \left(\frac{1}{9}\right) \text{ ratio of surface areas}$$

The volumes of two similar cylinders are  $250\pi$  cubic inches and  $1024\pi$  cubic inches. If the radius of the larger cylinder is 20 inches, what is the radius of the smaller cylinder?

$$\text{ratio of Volumes} = \frac{250\pi}{1024\pi} = \frac{125}{512}$$

$$\frac{\sqrt[3]{125}}{\sqrt[3]{512}} = \frac{5}{8} \quad \text{similarity ratio}$$

$$\frac{5}{8} = \frac{x}{20}$$

$$x = 12.5 \text{ in.}$$

Complete the following exercises from the review book in your notebook:

Section 10.1

Page 334 - 336 #s 1, 3, 20

Section 10.2

Page 342 - 343 #s 1, 2, 3, 4, 8

Section 10.3

Page 349 - 351 #s 1, 3, 6, 7, 8, 13, 14

