## SURFACE AREA, VOLUME, AND CAPACITY

Review

Now that you have finished this chapter, you should be able to:

- Explain, using examples, the difference between volume and surface area.
- Explain, using examples and nets, the relationship between area and surface area.
- Estimate and calculate the surface area and volume of a three-dimensional object.
- Explain, using examples, the difference between volume and capacity.
- Convert a volume in one unit of measure, such as cm^3, to another unit of measure, such as m^3.

- Describe the relationship between the volumes of cones and cylinders with the same base and height.
- Describe the relationship between the volumes of pyramids and prisms with the same base and height.
- Explain the effect a change in dimensions of a three-dimensional object has on its surface area and volume.

Hw???

V_{TOTAL}

4. A bulk food bin in a supermarket, as shown in the diagram, contains coffee beans. The bottom has a sliding gate so that the beans can be poured into bags.

25 cm
25 cm
40 cm
①
②
③
25 cm
7.5 cm
7.5 cm
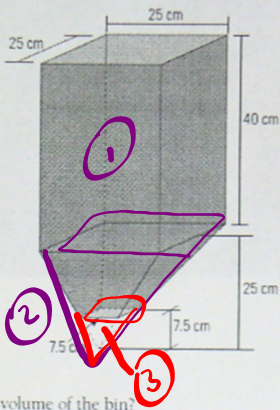
a) What is the volume of the bin?

b) One kilogram of coffee beans has a volume of 2250 cm³. How many kilograms of coffee beans does the bin hold?

b) $\dfrac{30067.7}{2250} =$

$13.4\ kg$

$V_① = 25^2 \times 40$

$V_① = 25000\ cm^3$

$V_② = \dfrac{25^2 \times 25}{3}$

$V_②^+ = 5208.\overline{3}\ cm^3$

$V_③ = \dfrac{7.5^2 \times 7.5}{3}$

$V_③^- = 140.625$

$30067.7\ cm^3$

UNIT TEST is on FRIDAY!

- Sample Test

    Chapter 6 Sample Test.pdf

    Chapter 6 Sample Test Answers.pdf

Attachments

Chapter 6 Sample Test Answers.pdf

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