Sec 1.7 Solving Problems Involving Objects

Formula given on final exam:

SA of a Cylinder: $2\pi r^2 + 2\pi rh$

SA of a Sphere: $4\pi r^2$

SA of a Cone: $\pi r^2 + \pi rs$

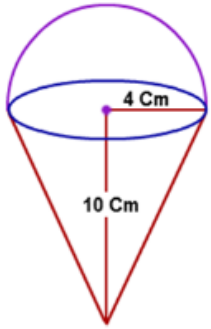
V of a Pyramid: $\frac{1}{3}Ah = \frac{Lwh}{3}$

V of a Sphere: $\frac{4\pi r^3}{3} = \frac{4}{3}\pi r^3$

V of a Cone: $\frac{\pi r^2 h}{3} = \frac{1}{3}\pi r^2 h$

A composite object is made up of two or more distinct objects.

Can you identify the two objects in this composite object?



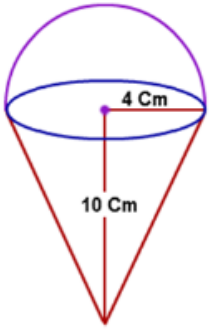
Example 1

a) Determine the volume of the composite object.

To determine the volume of a composite object, calculate the volume of each object, then add the volumes. There is no overlap!

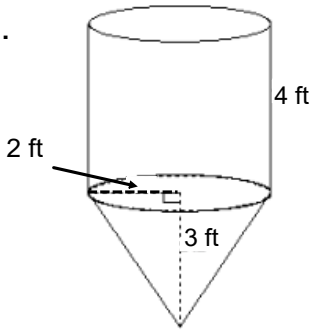
b) Determine the surface area of composite object.

To find the surface area of a composite object find the combined surface area of each object but do not include the overlap.



Example 2

A funnel is used to pour dough into pans in a bakery. What is its volume and surface area?



↪ First identify the two objects in this composite object.

Work Book Questions	Extra Practice Questions
p.59 #3bc, 5a, 9a, 10a	p.59 #3ad, 6b, 10b