

VOLUME OF CIRCULAR OBJECTS - PRACTICE PROBLEMS:

The basics:

(1) Write down each formula:

- Volume of a cylinder = _____
- Volume of a cone = _____
- Volume of a sphere = _____

(2) In each formula, what does “r” stand for? _____

What’s the definition of this term? _____

The real fun ... Apply it!

(3) How many times do you have to pump to fill each ball?



Information you might need:

- diameter of the pump = 2 inches
- height of the pump = 24 inches
- diameter of a soccer ball is 8.66 inches
- radius of the beach ball is 12 inches

(4)

Yay! We're going on a field trip!!!

We're bringing Gatorade in the big jug and dixie cups for everyone to use for drinks.

The gatorade jug is 96.5 cm tall and 40 cm across (diameter).

The cups are 8 cm tall and have a radius of 3 cm.



(a) How many cup-fulls does the big Gatorade jug hold?

(b) If 104 8th-graders go on the trip, do you think one Gatorade jug will be enough? Why?