Name _____   Date _____

Explanation#1

The equation for volume of a cylinder is:

$V = \Pi r^2 h$ Our radius and height were given to us in the problem.

$V = 3.14\ (20)^2 (40)$

$V = 50{,}240\ ft^3$

Explanation#2

We are given all the information we need; in the proper units.

Radius is ½ diameter (3/2). r = 1.51.5

$V = 1/3 \Pi r^2 h$

$V = 1/3\ (3.14)\ (1.5)^2 (6)$

$V = 14.1\ in^3$

Explanation#3

Step 1) We first must recognize that we are looking for the volume of a sphere.

Step 2) We will need the radius of the balloon which is (18/2) 9 cm.

Step 3) $V = 4/3 \Pi r^3$

$V = 4/3\ (3.14)\ (9)^3$

$V = 3052.08\ cm^3$