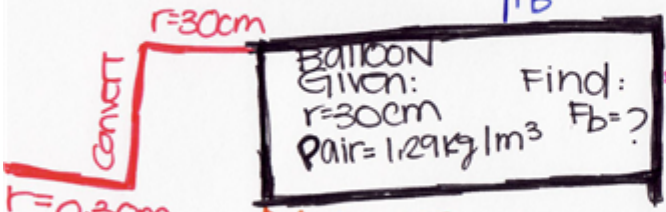


$$\rho = \text{Density} \quad \rho = M/V$$

Density
BOYANT FORCE $F_b = m_{air}g = (\rho_{air}V)g$

$$F_b = (1.29 \text{ kg/m}^3)(0.11 \text{ m}^3)(9.8 \text{ m/s}^2) \quad F_b = 14 \text{ N}$$



$V = \text{volume}$
 $V = \frac{4}{3}\pi r^3$
 $V = \frac{4}{3}\pi (0.30 \text{ m})^3$
 $V = 0.11 \text{ m}^3$

