

Assign. 1H

$$4. m = 95.28g \quad V = 52.67\text{mL} \quad D = \underline{\hspace{2cm}} \text{g/mL}$$

$$D = \frac{m}{V} = \frac{95.28g}{52.67\text{mL}}$$

$$D = \underline{1.81 \text{g/mL}}$$

Density (D) $D = \frac{m}{V}$

Solve for m (mass)

$$V \cdot D = \frac{m}{\cancel{V}} \cdot \cancel{V}$$

$$m = D \cdot V$$

(g) (g/mL) (mL)

Solve for v (volume)

$$\frac{m}{D} = \frac{\cancel{D} \cdot V}{\cancel{D}}$$

$$V = \frac{m}{D}$$

(mL) (g) (g/mL)

Ex 1: $D = 0.812 \text{ g/mL}$ $V = 98.3 \text{ mL}$
 $m = \underline{\hspace{2cm}} \text{ g}$

$$m = D \cdot V$$

$$= 0.812 \text{ g/mL} \cdot 98.3 \text{ mL}$$

$$m = \underline{79.82 \text{ g}}$$

$$D = \frac{m}{V}$$

$$m = D \cdot V$$

$$V = \frac{m}{D}$$

Measurement

Quantity + unit + label
36.9 g Water
 space

add / sub.

rnd to smallest
 # places after decimal
 $36.\underline{1}g + 9.82g$
 └→ rnd to 1 after

mult / divide

rnd to 2 after decimal