

Assign. 1H

Aug-26-2023 12:32 AM 1/4

4. $m = 95.28g$ $V = 52.67mL$ $D = \underline{\hspace{1cm}} g/mL$

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

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

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)

Aug-26-2023 12:32 AM 2/4

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

$$m = D \cdot V$$

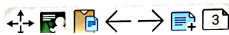
$$= 0.812 \text{ g/mL} \cdot 98.3 \text{ mL}$$

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

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

$$m = D \cdot V$$

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



Measurement

Quantity + unit + label
36.9 g water
 space

add / sub.

rnd to smallest
 # places after decimal

$$36.1\text{g} + 1.82\text{g}$$

→ rnd to 1 after

mult / divide

rnd to 2 after decimal

