



## Density Calculations Worksheet I

$$\text{Density} = \frac{\text{mass}}{\text{volume}}$$

$$\text{Volume of liquid in} \\ \text{cylinder (g)} = \text{mass (g)} - \text{mass (g)}$$

1. Find the unknown quantity (the left of DENSITY is already completed for you)

a) $d = 3 \text{ g/mL}$ $V = 200 \text{ mL}$ $M = ?$	b) $d = ?$ $V = 1000 \text{ mL}$ $M = 850 \text{ g}$	c) $d = 0.8 \text{ g/cm}^3$ $V = ?$ $M = 250 \text{ g}$
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**WORD PROBLEMS.** Use DENSITY to complete each question.

1. A block of aluminum occupies a volume of 25.0 mL, and weighs 40.5 g. What is its density?

Given	
Required	
Analysis	
Solution	
Paraphrase	

2. Mercury metal is poured into a graduated cylinder that holds exactly 22.5 mL. The mercury used to fill the cylinder weighs 306.0 g. From this information, calculate the density of mercury.

Given	
Required	
Analysis	
Solution	
Paraphrase	