

PROBLEM SET # 2

(a) 2% lidocaine = $\frac{2\text{g lidocaine}}{100\text{mL H}_2\text{O}}$

(b) $\frac{2\text{g}}{100\text{mL}} \Rightarrow \frac{x}{10\text{mL}}$

$$100x = 20$$

$$x = \frac{20}{100} = .2\text{g}$$

$$\frac{.2\text{g lidocaine}}{10\text{mL H}_2\text{O}}$$

(c) 2% lidocaine = $\frac{2\text{g}}{100\text{mL}} = 2:100$
= $\boxed{1:50}$

(d) 2% lidocaine = $\frac{2\text{g}}{100\text{mL}} \Rightarrow \frac{2,000\text{mg}}{100\text{mL}}$
= $\boxed{20\text{mg/mL}}$