

Taylor Lowe

$$1.)^a \quad 1,000 \div 150 \approx 7 \text{ hours}$$

$$b \quad \frac{150 \text{ mL}}{60} \cdot \frac{10 \text{ gtt}}{1 \text{ mL}} = 25 \text{ gtt/min (macro)}$$

$$\frac{150 \text{ mL}}{60} \cdot \frac{60 \text{ gtt}}{1 \text{ mL}} = 150 \text{ gtt/min (micro)}$$

c.) macro tubing

$$2.) \quad \frac{100 \text{ mL}}{300 \text{ min}} \cdot \frac{10 \text{ gtt}}{1 \text{ mL}} \approx 3 \text{ gtt/min}^{\text{macro}}$$

$$\frac{100 \text{ mL}}{300} \cdot \frac{60}{1 \text{ mL}} \approx 17 \text{ gtt/min}^{\text{micro}}$$

b.) micro drip

3.)^a Either set the pump to deliver 150 mL over 3 hours or let the bag empty till 150 mL.

$$b \quad \frac{150 \text{ mL}}{180 \text{ min}} \cdot \frac{15}{1 \text{ mL}} \approx 13 \text{ gtt/min (macro)}$$

$$\frac{150 \text{ mL}}{180 \text{ min}} \cdot \frac{60}{1 \text{ mL}} \approx 50 \text{ gtt/min (micro)}$$

c.) micro because its smaller amount.

4.) $500 \text{ mL} \div 24 \text{ hrs} = 21 \text{ gtt/min}$

5.) a) $\frac{125 \text{ mg}}{60 \text{ min}} \cdot \frac{10}{1 \text{ mL}} = 21 \text{ gtt/min}$

b) 125 mL/hr

6.) a) $1 \text{ g} = 10 \text{ mL}$
 $500 \text{ mg} = 5 \text{ mL}$

b) $\frac{250}{8} = 31 \text{ gtt/min}$

7.)
$$\begin{array}{r} 125 \\ \times 20 \\ \hline 2500 \text{ mL} \end{array}$$

$$\begin{array}{r} 75 \\ \times 4 \\ \hline 300 \text{ mL} \end{array}$$

2800 mL

8.) a) 90 mL/hr

b) $1,000 \div 90 = 11 \text{ hours}$

9.) $\frac{0.5 \text{ g}}{500 \text{ mL}} \Rightarrow \frac{500 \text{ mg}}{500 \text{ mL}}$ 1:1 Ratio 1 mg

10.) a) 75 mL of D5W

b) $\frac{75 \cdot 60}{60} = 75 \text{ mL/hour (60 min)}$

$\frac{75 \cdot 60}{90} = 50 \text{ mL/hour (90 min)}$