

Proficiency test pg 244

1. A. $\frac{1000\text{mL}}{150\text{mL/hr}} = 7\text{hr}$

B. $X\text{gtt/min} = \frac{10\text{gtt}}{1\text{mL}} \cdot \frac{150\text{mL}}{1\text{hr}} \cdot \frac{1\text{hr}}{60\text{min}} = \frac{1500}{60} = 25\text{gtt/min}$

$$\frac{60\text{gtt}}{1\text{mL}} \cdot \frac{150\text{mL}}{1\text{hr}} \cdot \frac{1\text{hr}}{60\text{min}} = \frac{9000}{60} = 150\text{gtt/min}$$

C. macro tubing

2. A. $\frac{10\text{gtt}}{1\text{mL}} \cdot \frac{100\text{mL}}{1\text{hr}} \cdot \frac{1\text{hr}}{60\text{min}} = \frac{1000}{60} = 3\text{gtt/min}$

$$\frac{60\text{gtt}}{1\text{mL}} \cdot \frac{100\text{mL}}{1\text{hr}} \cdot \frac{1\text{hr}}{60\text{min}} = \frac{6000}{60} = 17\text{gtt/min}$$

B. micro drip tubing

3. A. Set the volume to run at 150 mL

B. $\frac{15\text{gtt}}{1\text{mL}} \cdot \frac{150\text{mL}}{3\text{hr}} \cdot \frac{1\text{hr}}{60\text{min}} = \frac{2250}{180} = 13\text{gtt/min}$

$$\frac{60\text{gtt}}{1\text{mL}} \cdot \frac{150\text{mL}}{3\text{hr}} \cdot \frac{1\text{hr}}{60\text{min}} = \frac{9000}{180} = 50\text{gtt/min}$$

C. micro drip

$$4. \frac{500 \text{ mL}}{24 \text{ hr}} = 21 \text{ mL/hr}$$

5. A. add 100 mg powder to 250 mL and give IVPB over 1 hour.

$$B. \frac{10 \text{ gtt}}{\text{mc}} \cdot \frac{250 \text{ mL}}{1 \text{ hr}} \cdot \frac{1 \text{ hr}}{60 \text{ min}} = \frac{2500}{60} = 42 \text{ gtt/min}$$

$$6. A. \frac{10 \text{ mL}}{1 \text{ g}} \cdot \frac{500 \text{ mg}}{1000 \text{ mg}} \cdot \frac{1 \text{ g}}{1000 \text{ mg}} = \frac{5000}{1000} = 5 \text{ mL}$$

$$B. \frac{250 \text{ mL}}{8 \text{ hr}} = 31 \text{ mL/hr (31 gtt/min)}$$

$$7. \begin{array}{r} 125 \\ \times 20 \\ \hline 2500 \text{ mL} \end{array} \quad \begin{array}{r} 75 \\ \times 4 \\ \hline 300 \text{ mL} \end{array} \quad 2500 + 300 = 2800 \text{ mL}$$

8. A 90 mL/hour

$$B. \frac{1000 \text{ mL}}{90 \text{ mL/hr}} = 11 \text{ hours}$$

9. 50 milligrams.

A

10. Take a 100 mL and remove 25 mL
Add 5 mL Bactrim to 75 mL. Time is 60 min
75 mL / hour

B. set pump for 60 min

$$11. \frac{3}{4} \cdot 150 = 112.5 \text{ mL IsoCal}$$

$$150 - 112.5 = 37.5 \text{ mL water}$$

$$12. \frac{1}{2} \cdot 500 = 250 \text{ mL Vivonex}$$

$$500 - 250 = 250 \text{ mL water}$$

$$13. \frac{1}{4} \cdot 400 = 100 \text{ mL Osmolite}$$

$$400 - 100 = 300 \text{ mL water}$$

$$14. 500 \text{ mL IsoCal}$$

$$0 \text{ mL water}$$