

HENKE Med Math  
Chapter 4: Proficiency Test 1

1.  $20/20 \cdot 15 = 10 \text{ mL}$
2.  $150/15 \cdot 7.5 = 15 \text{ mL}$
3.  $\frac{0.125}{.25} \cdot 10 = 5 \text{ mL}$
4.  $375/125 \cdot 5 = 15 \text{ mL}$
5.  $40/20 \cdot 2.5 = 5 \text{ mL}$
6.  $0.5/.25 = 2 \text{ tabs}$
7.  $100/1000 = 0.1 \text{ mg} / 0.1 \text{ g} = 1 \text{ tab}$
8.  $250/100 = 2.5 \text{ tabs}$
9.  $500 \text{ mg} / 250 \text{ mg} = 2 \text{ tabs q 6h}$
10.  $300 \text{ mg} / 300 = 1 \text{ tab}$

Chapter 5: Proficiency Test 2

1.  $10 \text{ mg} / 15 \text{ mg} = 0.67 \text{ mL} / \frac{2}{3} \text{ mL}$
2.  $100 \text{ mg} / 100 \text{ mg} \cdot 3 = 15 \text{ mL}$
3.  $1000 / 5000 = 0.2 \text{ mL}$
4.  $1\% = 1 \text{ g in } 100 \text{ mL}$   
 $25 / 1000 \cdot 100 = 2.5 \text{ mL}$
5.  $0.7 / 0.4 = 1.25 \text{ mL}$
6.  $10 + 3 = 13 \text{ units}$
7.  $1.2 / 0.5 = 2.4 \text{ mL}$
8.  $1000 \text{ mg} / 1000 \text{ mL} \cdot 500$   
 $5 / 1000 \cdot 1000 = 0.5 \text{ mL}$
9. a. 2 mL      e. nothing left.  
b. 1 g / 2 g      f. discard after use.  
c. 2.6 mL  
d. 2.6

10. a. 1.8 mL  
b. 250 mg/mL  
c.  $300 / 250 = 1.2 \text{ mL}$   
d. 1.2 mL  
e. discard  
f. no discard.

Chapter 6: Proficiency Test 1

1. a.  $1000 / 150 = 6.7 \text{ hrs} ; \sim 7 \text{ hrs}$   
b.  $\frac{150 \times 10}{60} = 25 \text{ gtt/min}$   
 $\frac{150 \times 60}{60} = 150 \text{ gtt/min}$   
c. macro drip
2. a.  $\frac{100 \cdot 10}{60} = 17 \text{ gtt}$        $\frac{100 \times 60}{60} = 100 \text{ gtt}$   
b. micro tubing
3. a. stock  $\rightarrow$  in 100 mL of  
or  
infusion pump set for 80  
b.  $3 \text{ hr} = 180 \text{ min}$   
 $\frac{150 \cdot 15}{180} = 13 \text{ gtt}$   
 $\frac{150 \cdot 60}{180} = 50 \text{ gtt}$   
c. micro
4.  $\frac{\text{mL}}{\text{hr}} = \frac{500}{24} = 21 \frac{1}{3} \text{ mL/hr}$
5. a. add 100 mg to 250 mL  
b.  $\frac{250 \cdot 10}{60} = 42 \text{ gtt}$
6. a.  $\frac{200 \text{ mg}}{1000 \text{ mg}} \cdot 10 \text{ mL} = 5 \text{ mL}$   
b.  $\frac{250}{8} = 31 \text{ mL/hr}$   
micro

$$7. \begin{array}{l} 125 \cdot 20 = 2500 \text{ mL} \\ 75 \cdot 4 = 300 \\ \hline 2800 \text{ mL} \end{array}$$

8. a. 90 ml/hr

b.  $1000/90 = \sim 11 \text{ hrs}$

9. 50 mg/hr

10. a. 75 ml/hr

b. 50 ml/hr

11.  $\frac{3}{4} \cdot 150 = 112.5 \text{ mL Isocal}$   
 $150 \text{ mL} - 112.5 = 37.5 \text{ water}$

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

13.  $\frac{1}{4} \cdot 400 = 100 \text{ mL Isomaltol}$   
 $300 \text{ mL water}$

14. 500 mL Isocal

Chapter 7: self Test 4 #1-2

1. a.  $\frac{800}{2500} \cdot 250 = 8 \text{ ml/hr}$

b.  $250/8 = 31 \text{ hrs}$

2. 100 ml/hr