

Chapter 4 self test 2  
Chapter 5 self test 3  
Chapter 8 self test 5

### Chapter 4

1. order: 0.75g qid  
Supply: 250mg/mL  $\frac{750\text{mg}}{250\text{mg}} \times 1 = 3\text{ mL}$
2. order: 500mg q8h  
Supply: 250mg  $\times 5\text{ mL} = 10\text{ mL}$
3. order: 0.35g q6h  
Supply: 100mg/mL  $\frac{350}{100} = 3.5\text{ mL}$
4. 150mg daily  
5. 100mg  $\times 1 = 1.5\text{ mL}$
15. 100mg  
20mg  $\times 5\text{ mL} = 25\text{ mL}$
5. 5mg bid  
10mg  $\times 1\text{ mL} = 0.5\text{ mL}$
16. 650mg  
160mg  $\times 5\text{ mL} = 20.3 = 20\text{ mL}$
6. 0.02mg  
0.05mg  $\times 1\text{ mL} = 0.4\text{ mL}$
17. 25mg  
12.5mg  $\times 5\text{ mL} = 10\text{ mL}$
7. 30mEq  
20mEq  $\times 15\text{ mL} = 22.5\text{ mL}$
18. 50mg  
10mg  $\times 5\text{ mL} = 25\text{ mL}$
8. 0.25mg  
0.25mg  $\times 1\text{ mL} = 1\text{ mL}$
19. 100mg  
50mg  $\times 15\text{ mL} = 30\text{ mL}$
9. 3mg  
1mg  $\times 1\text{ mL} = 3\text{ mL}$
20. 0.06g  $\rightarrow 60\text{mg}$   
15mg  $\times 5 = 20\text{ mL}$
10. 12.5mg  
6.25mg  $\times 5\text{ mL} = 10\text{ mL}$
11. 50mg  
10mg  $\times 5\text{ mL} = 25\text{ mL}$
12. 40mg  
10mg  $\times 1\text{ mL} = 4\text{ mL}$
13. 10mEq  
20mEq  $\times 30\text{ mL} = 15\text{ mL}$
14. 10mg  
5mg  $\times 5\text{ mL} = 10\text{ mL}$



chapter 8 self test 5

1. Order: 200mg q6hr 10mL 8kg  
Supply - 750mg 8mL  
50-100mg/kg/day q6-8hr  
 $200\text{mg} \times 8\text{kg} = 1600\text{mg/kg/dose}$   $1600/4 = 400$

$50\text{mg} \times 8 = 400\text{mg/kg/day}$   
 $100\text{mg} \times 8 = 800\text{mg/kg/day}$

safe

2. Order: 75mg q12hr 15mL 15kg  
L: 8-10mg/kg/day q12hr

$8\text{mg} \times 15\text{kg} = 120\text{mg/kg/day}$   
 $10\text{mg} \times 15\text{kg} = 150\text{mg/kg/day}$

$75/\text{dose} \times 2\text{ x/day} = 150\text{mg/kg/day}$

safe

3. 100mg q8hr in 50mL 40kg  
S - 80mg/2mL  
L - 3-5mg/kg/day q8hr

$100\text{mg} \times 40\text{kg} = 4000\text{mg/kg/dose}$  too high  
 $3\text{mg} \times 3 = 9\text{mg/dose}$   $9 \times 40 = 360\text{mg/kg/day}$   
 $5\text{mg} \times 3 = 15\text{mg/dose}$   $15 \times 40 = 600\text{mg/kg/day}$

4. 900mg q6hr 8kg 1g/10mL 50-200mg/kg/day  
 $3600\text{mg/day} \times 18\text{kg} = 16200\text{mL/day}$

$50\text{mg} \times 18 = 900$   
 $200\text{mg} \times 18\text{kg} = 3600$

too high

10. 60mg bid  $\times 2 = 120/\text{day}$     80 lbs  $\rightarrow$  36.36 kg    0.5-1.7 mg/kg/day  
 $\times 0.5 = 18.18$   
 $\times 1.7 = 61.818$   
 too high    **Not safe**

5. 150mg q8hr 10ml    order    supply 500mg, 1.7ml    kg 18  
 Lit: 50-100-200 mg/kg/day  
 $150 \times 3 = 450 \text{ mg/day}$      $\times 18 \text{ kg} = 8100$     **too Low**  
 ~~$100 \times 18 = 1800$~~   
 ~~$200 \times 18 = 3600$~~     **Not safe**

6. 30kg 2.5mg q4hr 1mg/1ml    0.05-0.1 mg/kg/q4hr  
 $2.5 \times 30 = 75 \text{ mg/dose}$   
 $0.5 \times 30 = 15 \text{ mg/dose}$   
 $0.1 \times 30 = 3 \text{ mg/dose}$     **Safe**

7. 4mg BID 25kg    0.08-0.3 mg/kg/day  
 $\times 2 = 8 \text{ mg/day}$   
 $0.08 \times 25 = 2 \text{ mg/day}$   
 $0.3 \times 25 = 7.5 \text{ mg/day}$     **too high**

8. 25mg q4-6hr 45kg    12.5-25mg q4-6hr  
 $45 \text{ kg} \times 12.5 \text{ mg} = 562.5 \text{ mg/dose}$   
 $45 \times 25 = 1125 \text{ mg/dose}$     **Safe**    <300mg/day

9. 50 mcg/day 15 lbs    6-7.5 mcg/kg/day  
 $6 \times 6.818 = 40.908 \text{ mcg/day}$   
 $7.5 \times 6.818 = 51.135 \text{ mcg/day}$     **SAFE**