Med Math HW #2

Pg 269: Self-test #1

1) 250mL/25,000 units = 800 units/ X
   Answer: 8mL/hr
   B. 250mL/ 8mL= 31.25
   The IV will run for 31 hours.
2) 100mL/1hr = 100 mL/hr
3) 1000mL/ 24 hr = 42mL/hour
4) 100mL/125 mg = 10mg/ x hr = 8mL/hr
5) 100mL/100 mg = 4mg/ x hr = 4 mL/hr
6) 250 mL/ 125 units = 15 units/ x hr = 30 mL/hr
7) 250mL/ 24 hr = 10mL/hr
8) 500mL/25,000 units = 12,000 units/ x hr = 24 mL/hr
   B. 500mL / 24 mL/ hr = 21. IV will run for 21 hours.

9) 250 mL/ 250 units = 23 units/ x hr = 23 mL/hr

   B. 250mL / 23mL/ hr = 11 hrs. IV will run for 11 hours

10) 250 mL/ 750,000 units = 100,000 units/ x hr = 33 mL/ hr


Pg 244: Proficiency test

1. A. 1000/ 150 = 6.6 hours

   B. 150 x 10 / 60 = 25 gtt/minute

      150 x 60 / 60 = 150 gtt/minute

   C. Macro tubing

2. 6hr x 60 min= 360 minutes
   100 x 60/ 360 = 17 gtt/ minute
   100 x 10 / 360 = 3 gtt/ minute
3. A. I would let 100 mL run off so that I could set the volume to be infused at 150 mL.
   B. 150 x 15/ 180 = 13 gtt/min
      150 x 60/ 180 = 50 gtt/min
   C. microtubing
4. 500 mL/ 24 hours = 21 mL/ hour
5. A. add 100 mg powder to 250 mL of D5W and give the IVPB over 60 minutes
   B. 250 x 10 / 60 = 42 gtt/min
6. A. 500 mg/ 1000 mg x 10 mL = 5 mL
   B. 250 mL/ 8 hours = 31 mL/hour
7. 125 x 20 = 2500 mL and 75 x 4 = 300
   2500 + 300 = 2800 mL

8.  A. 90 mL/ hour
    B. 1000 / 90 = 11 hours
9. 50 mg
10. A. 75 mL in D5W. time is 60 minutes. 100 ml – 25 mL then add 5 mL to the 75 mL that was left over.
    b. 75 mL/ hour
11. 0.75 x 150 mL = 112.5 mL Isocal
    150 mL – 112.5 mL = 37.5 mL water
12. 0.5 x 500mL= 250mL Vivonex
    500mL – 250 mL = 250mL water
13. 0.25 x 400mL = 100 mL
    400mL – 100mL = 300mL water
14. 500 mL of isocal & 0 mL of water