Proficiency Test 2

CH 4 Calculation of oral Medications — Adult Health II

1. $X\text{Tab} = \frac{1\text{Tab}}{400\text{mg}} \cdot 0.8\text{g} \cdot \frac{1000\text{mg}}{1\text{g}} = \frac{800}{400} = 2\text{ Tab}$

2. $X\text{Tab} = \frac{1\text{Tab}}{300\text{mg}} \cdot 0.3\text{g} \cdot \frac{1000\text{mg}}{1\text{g}} = \frac{300}{300} = 1\text{ Tab}$

3. $X\text{Tab} = \frac{1\text{Tab}}{50\text{mg}} \cdot 75\text{mg} = \frac{75}{50} = 1.5\text{ Tab}$

4. $X\text{Tab} = \frac{1\text{Tab}}{325\text{mg}} \cdot 0.65\text{g} \cdot \frac{1000\text{mg}}{1\text{g}} = \frac{650}{325} = 2\text{ Tab}$

5. $X\text{Tab} = \frac{1\text{Tab}}{2.5\text{mg}} \cdot 10\text{mg} = \frac{10}{2.5} = 4\text{ Tab}$

6. $X\text{mL} = \frac{\text{mL}}{100{,}000\text{units}} \cdot 750{,}000\text{ units} = \frac{750{,}000}{100{,}000} = 7.5\text{mL}$

7. $X\text{mL} = \frac{5\text{mL}}{250\text{mg}} \cdot 0.75\text{g} \cdot \frac{1000\text{mg}}{1\text{g}} = \frac{3750}{250} = 15\text{mL}$

8. $X\text{mL} = \frac{5\text{mL}}{250\text{mg}} \cdot 500\text{mg} = \frac{2500}{250} = 10\text{mL}$

9. 30 mL

10. $X\,mL = \frac{15\,mL}{80\,mg} \cdot 160\,mg = \frac{2400}{80} = 30\,mL$

Ch 5 Self Test 1 Liquids for Injection

1. $X\,mL = \frac{2\,mL}{300\,mg} \cdot 0.3\,g \cdot \frac{1000\,mg}{1\,g} = \frac{600}{300} = 2\,mL$

2. $X\,mL = \frac{mL}{15\,mg} \cdot 12\,mg = \frac{12}{15} = 0.8\,mL$

3. $X\,mL = \frac{mL}{1000\,mg} \cdot 1\,mg \cdot \frac{1000\,mg}{1\,mg} = \frac{1000}{1000} = 1\,mL$

4. $X\,mL = \frac{2\,mL}{20\,mg} \cdot 9\,mg = \frac{18}{20} = 0.9\,mL$

5. $X\,mL = \frac{mL}{40\,mg} \cdot 50\,mg = \frac{50}{40} = 1.3\,mL$

6. $X\,mL = \frac{mL}{130\,mg} \cdot 100\,mg = \frac{100}{130} = 0.77\,mL$

7. $X\,mL = \frac{2\,mL}{0.5\,mg} \cdot 0.125\,mg = \frac{0.25}{0.5} = 0.5\,mL$

8. $X\,mL = \frac{mL}{10{,}000\ units} \cdot 6000\ units = \frac{6000}{10{,}000} = 0.6\,mL$

9. $X\,mL = \frac{1\,mL}{1\,mg} \cdot 0.25\,mg = \frac{0.25}{1} = 0.25\,mL$

10. $X\,mL = \frac{mL}{5\,mg} \cdot 20\,mg = \frac{20}{5} = 4\,mL$

11. $X\,mL = \frac{mL}{5\,mg} \cdot 2.5\,mg = \frac{2.5}{5} = 0.5\,mL$

12. $X\,mL = \frac{ml}{10\,mg} \cdot 3\,mg = \frac{3}{10} = 0.3\,mL$

13. $X\,mL = \frac{mL}{10\,mg} \cdot 0.025\,g \cdot \frac{1000\,mg}{1\,g} = \frac{25}{10} = 2.5\,mL$

14. $X\,mL = \frac{mL}{25\,mg} \cdot 50\,mg = \frac{50}{25} = 2\,mL$

15. $X\,mL = \frac{0.2\,mL}{5000\ units} \cdot 2500\ units = \frac{500}{5000} = 0.1\,mL$

Calculation of Basic IV Drip Rates

CH 6 Self TEST 5, Self TEST 6

1. 3/4 = .75
   .75 · 275 = 206.25 ISOcal
   275 − 206.25 = 68.75 mL water

2. .75 · 75 = 56.25 mL magnacal
   75 − 56.25 = 18.75 mL water

3. .5 · 100 = 50 mL Osmolite
   100 − 50 = 50 mL water

4. .25 · 85 = 21.25 mL Ensure
   85 − 21.25 = 63.75 mL water

5. .25 · 400 = 100 mL Renalcal
   400 − 100 = 300 mL water

6. .50 · 400 = 200 mL Suplena
   400 − 200 = 200 mL water

CH 6

SELF TEST 6

1. $X\,hr = \frac{hr}{100\,mL} \cdot 900\,mL = \frac{900}{100} = 9\,hr,\ 6\,pm$

2. $75\,ml \cdot 4 = 300\,mL$

$125\,ml \cdot 20 = 2500\,mL$

$2500 + 300 = 2800\,mL$ in 24 hr

3. $10 \cdot 8 = 80\,mL$ in 8 hr

4. $0.5\,g \cdot \frac{1000\,mg}{1\,g} = 500\,mg$

$X\,mg = \frac{500\,mg}{500\,mL} \cdot \frac{50\,mL}{hr} = \frac{25000}{500} = 50\,mg/hr$

5. $X\,hr = \frac{hr}{30\,mL} \cdot 500\,mL = \frac{500}{300} = 16.7\,hrs$

6. $50 \cdot 3 = 150\,mL$

$100 \cdot 21 = 2100\,mL$

$2100 + 150 = 2250\,mL$ in 24 hr

7. $X\,hr = \frac{hr}{50\,mL} \cdot 500\,mL = \frac{500}{50} = 10\,hr,\ 4\,pm$

8. $X\,hr = \frac{hr}{125\,mL} \cdot 1000\,mL = \frac{1000}{125} = 8\,hr$

9. $250 \cdot 4 = 1000\,mL$ in 24 hr

10. $X\,units = \frac{100\,units}{100\,mL} \cdot \frac{10\,mL}{hr} = \frac{1000}{100} = 10\,units/hr$

Ch 7 Special Types of IV Calculations SELF TEST 4
only #3

3. Ht $6ft \cdot \frac{12in}{1ft} = 72 + 2 = 74in$

$74 \cdot 2.54 = 187.96\,cm$

Wt 170 lb

$170 / 2.2 = 77.27\,kg$

$77.27 \cdot 187.96 / 3600 = 2.0\,m^2$

A. $40\,mg/m^2 \cdot 2 = 80\,mg$

B. $80\,mL/hr$