Ch 5 Proficiency Test 1

Anisha Coleman

1. sodium 0.1g > 200mg/3mL
$\frac{3\text{mL}}{200\text{mg}} \times \frac{1000\text{mg}}{1\text{g}} \times 0.1\text{g} = 1.5\text{mL}$

2. morphine 5mg > 15mg/mL
$\frac{1\text{mL}}{15\text{mg}} \times 5\text{mg} = 0.33\text{mL}$

3. diphenhydramine 25mg > 50mg/2mL
$\frac{2\text{mL}}{50\text{mg}} \times 25\text{mg} = 1\text{mL}$

4. NPH 15 units
Humulin 5 units > 20 units
100 units/mL

5. 20 mEq potassium > 40mEq/20mL
$\frac{20\text{mL}}{40} \times 20 = 10\text{mL}$

6. Scopolamine 0.6mg > 0.4mg/mL
$\frac{\text{mL}}{0.4} \times .6\text{mg} = 1.5\text{mL}$

7. atropine 0.8mg > 0.4mg/mL
$\frac{\text{mL}}{0.4\text{mg}} \times 0.8 = 2\text{mL}$

8. dextrose 0.5g > 250mg/mL
$\frac{\text{mL}}{250\text{mg}} \times \frac{1000\text{mg}}{1\text{g}} \times 0.5\text{g} = 2\text{mL}$

9. vitamin c 200mg > 500mg/2mL
$\frac{2\text{mL}}{500\text{mg}} \times 200\text{mg} = 0.8\text{mL}$

10. epinephrine 7.5mg > ampule 1:100
(1g = 1000mg)
(1g = 100mL)
$\frac{100\text{mL}}{1\text{g}} \times \frac{1\text{g}}{1000\text{mg}} \times 7.5\text{mg} = 0.75\text{mL}$

5. diazepam 1mg q3-4hr
30yrs old
Val 5mg/mL
ch

$\frac{1\,mL}{5mg} \times 1mg = 0.2mg$

11. diazepam 10 mg
5 mg/mL

$\frac{1\,mL}{5mg} \times 10mg = 2mL$

6. mo
3yr
inje
dosa

12. chlordiazepoxide 25 mg
100 mg/2 mL

$\frac{2\,mL}{100mg} \times 25mg = 0.5mL$

13. hydroxyzine 50 mg
25 mg/mL

$\frac{mL}{25mg} \times 50mg = 2mL$

7. me
3yrs
syn
0.1

14. lorazepam 0.5mg
2mg/mL

$\frac{mL}{2mg} \times 0.5mg = 0.25mL$

15. phenytoin 0.2g
200 mg/2mL

$\frac{2\,mL}{200mg} \times \frac{1000mg}{1g} \times .2g = 2mL$

8. Ceft
vre
inje
< 5

9.

Ch 4 Self-Test 1

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1. dexamethasone 1.5 mg
available = 0.75 mg tab
$> \frac{1 \text{ tab}}{0.75 \text{ mg}} \times 1.5 \text{ mg} =$ 2 tabs

2. digoxin 0.25 mg
0.5 mg tab
$> \frac{1 \text{ tab}}{0.5 \text{ mg}} \times 0.25 \text{ mg} =$ 0.5 tabs

3. ampicillin 0.5 g
250 mg capsule
$> \frac{1 \text{ cap}}{250 \text{ mg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times 0.5 \text{ g} =$ 2 capsules

4. prednisone 10 mg
2.5 mg tab
$> \frac{1 \text{ tab}}{2.5 \text{ mg}} \times 10 \text{ mg} =$ 4 tabs

5. aspirin 650 mg
325 mg tabs
$> \frac{1 \text{ tab}}{325 \text{ mg}} \times 650 \text{ mg} =$ 2 tabs

6. nifedipine 20 mg
10 mg cap
$> \frac{1 \text{ tab}}{10 \text{ mg}} \times 20 \text{ mg} =$ 2 tab

7. fluphenazine 10 mg
2.5 mg tab
$> \frac{1 \text{ tab}}{2.5} \times 10 \text{ mg} =$ 25 tab

8. penicillin 200,000 units
400,000 unit tab
$> \frac{1 \text{ tab}}{400{,}000} \times 200{,}000 =$ 0.5 tab

9. digoxin 0.5 mg
0.25 mg tab
$> \frac{1 \text{ tab}}{0.25} \times 0.5 =$ 2 tabs

10. captopril 18.75 mg
12.5 tabs
$> \frac{1 \text{ tab}}{12.5 \text{ mg}} \times 18.75 \text{ mg} =$ 1.5 tab

11. quetiapine 300 mg
200 mg tab
$> \frac{1 \text{ tab}}{200} \times 300 =$ 1.5 tab

12. clonidine 0.3 mg
0.1 mg tab
$> \frac{1 \text{ tab}}{0.1 \text{ mg}} \times 0.3 \text{ mg} =$ 3 tabs

13. captopril 6.25 mg
25 mg tab
$> \frac{1 \text{ tab}}{25} \times 6.25 =$ 0.25 tab

14. clonidine 400 mcg > $\frac{1\text{ tab}}{0.2\text{ mg}} \times \frac{1\text{ mg}}{1000\text{ mcg}} \times 400\text{ mcg} =$ 2 tab
0.2mg tab

15. warfarin 7.5mg > $\frac{1\text{ tab}}{5\text{ mg}} \times 7.5\text{ mg} =$ 1.5 tab
5mg tab

16. glyburide 0.625mg > $\frac{1\text{ tab}}{1.25\text{ mg}} \times 0.625\text{ mg} =$ 0.5 tab
1.25 tab

17. naproxen 0.5g > $\frac{1\text{ tab}}{250\text{ mg}} \times \frac{1000\text{ mg}}{1\text{ g}} \times 0.5\text{ g} =$ 2 tabs
250 mg tab

18. hydrochlorothiazide 37.5mg > $\frac{1\text{ tab}}{25\text{ mg}} \times 37.5\text{ mg} =$ 1.5 mg
25mg tab

19. cephalexin 1g > $\frac{1\text{ tab}}{500\text{ mg}} \times \frac{1000\text{ mg}}{1\text{ g}} \times 1\text{ g} =$ 2 tab
500 mg tab

20. baclofen 25 mg > $\frac{1\text{ tab}}{10\text{ mg}} \times 25\text{ mg} =$ 2.5 tab
10mg tab

Ch 8 Self-Test 2

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1. amoxicillin 60 mg Q8hr
   weigh 20 lb
   125 mg / 5 mL
   20–40 mg/kg/day

$\frac{Kg}{2.2} \times 20 = 9.09\ kg$

9.09 (20) = 181.8 mg/day
9.09 (40) = 363.6 mg/day
60 (3) = 180 mg/day LOW ✓
$\frac{5\ mL}{125} \times 60\ mg =$ 2.4 mL per dose

2. amoxicillin 175 mg Q8hr
   weigh 29 lb
   ~~bottle~~ 125/5 mL
   40 mg/kg/day

$\frac{Kg}{2.2} \times 29 = 13.18\ Kg$

13.18 (40) = 527.27 mg/day
$\frac{5\ mL}{125\ mg} \times 175\ mg =$ 7 mL per dose
175 (3) = 525 ✓

3. ferrous sulfate 200mg TID
   9yr old weigh 30 kg
   125 mg / 5mL
   60mg/day

$\frac{5\ mL}{125\ mg} \times 200\ mg =$ 8 mL TID

4. acetaminophen 80mg Q4
   6yrs weigh 20.5 kg
   80mg / tab
   4 tablets 4x daily

80 (4) = 320 mg
$\frac{1\ tab}{80\ mg} \times 80\ mg =$ 1 tab
too low

diazepam 1mg Q8-4hr
30 days
Vial 5mg / 1mL
Child < 60 months 1-2.5mg TID/QID

$\frac{1\text{mL}}{5\text{mg}} \times 1\text{mg} =$ 0.2mL

morphine 2mg Q8-Q4
3yr weigh 14kg
2mg / 1mL
0.05 to 0.2 mg/kg

0.05 (14) = 0.7 mg
0.2 (14) = 2.8 mg
$\frac{1\text{mL}}{2\text{mg}} \times 2\text{mg} =$ 1mL ✓

metoclopramide 5mg Q6hr
3yrs weigh 30kg
5mg / 5mL
0.1 to 0.2 mg/kg/dose Q4

0.1 (30) = 3
0.2 (30) = 6
$\frac{5\text{mL}}{5\text{mg}} \times 5\text{mg} =$ 5mL ✓

cefotaxime 0.5g Q6hr
weigh 48 lb
reconstitute 300 mg/mL
< 50 kg, 100 - 200mg/kg/day

$\frac{\text{kg}}{2.2} \times 48 = 21.81$ kg
100 (21.81) = 2181 / Q6 = 545.2
200 (21.81) = 4363 / Q6 = 1090.7 mg/day

0.5g = 500mg
too low

azithromycin 300mg/dose
10yrs old weigh 30 kg
100mg/5mL in 15mL bottle
Children 2-15, 10mg/kg

30 kg (10 mg/kg) = 300mg ✓

phenytoin 100mg
weigh 12lb 8oz
30mg/5mL
4-8 mg/kg/day BID, max 300

$\frac{\text{kg}}{2.2} \times 12.5 = 5.68$ kg
4 (5.68) = 22.7
8 (5.68) = 45.4
too high