N442 Med Math Practice Questions

Ensure that you review all other resources available to you, including, but not limited to, previous instructors' practice problems, ATI, and tutoring resources.

1. The prescriber ordered doxycycline 2.2 mg/kg/day to be given intravenously (IV) once daily. The child weighs 45 kg. How many mg per dose will the home health nurse give this client?

$$\frac{45\,kg}{1} \times \frac{2.2\,mg}{kg/day} = 99\,mg/day$$ (once daily dose)

2. A walk-in clinic nurse has received an order for amikacin 7.5 mg/kg intramuscularly (IM) every 12 hours. The strength on the vial is 250 mg/mL. How many mLs will the nurse administer to a client that weighs 99 pounds?

$$\frac{99\,lbs}{1} \times \frac{1\,kg}{2.2\,lbs} \times \frac{7.5\,mg}{1\,kg} \times \frac{1\,mL}{250\,mg} = \frac{742.5}{550} = 1.35\,mL$$

3. The provider ordered pramipexole 0.125 mg PO TID for a client with Parkinson's disease. How many milligrams per day is the client receiving?

$$\frac{0.125\,mg}{1\,dose} \times \frac{3\,doses}{1\,day} = 0.375\,mg/day$$

4. The provider ordered levothyroxine 0.05 mg PO daily. The strength on the label is 25 mcg/tab. How many tablets is the nursing home nurse going to administer?

$$\frac{0.05\,mg}{1} \times \frac{1000\,mcg}{1\,mg} \times \frac{1\,tab}{25\,mcg} = \frac{50}{25} = 2\,tabs$$

5. An order was received for hydroxyzine 75 mg PO QID. The available medication is 25 mg/5 mL strength. How many mLs is the nurse going to administer?

$$\frac{75\,mg}{1} \times \frac{5\,mL}{25\,mg} = 15\,mL$$

6. A child weighing 13kg is ordered Theophylline 65 mg every 6 hours via his G-tube. The recommended dosage is 22mg/kg/24hours. The bottle is labeled 80mg/15mL. How many mLs will the home health nurse give this child?

$$\frac{65\text{mg}}{1} \times \frac{15\text{mL}}{80\text{mg}} = 12.1875\text{ mL}$$

7. The emergency room nurse received an order of haloperidol 60 mg intramuscularly (IM) STAT. The strength on the label is 50 mg/mL. How many mLs will the nurse administer?

$$\frac{60\text{mg}}{1} \times \frac{1\text{mL}}{50\text{mg}} = 1.2\text{mL}$$

8. A home health nurse is caring for client who has sepsis and a prescription for vancomycin 1 g in 250 mL dextrose 5% (D_5W) over 2 hr by IV intermittent bolus. The nurse should set the IV pump to deliver how many mL/hr?

$$\frac{250\text{mL}}{2\text{ hrs}} = 125\text{mL/hr}$$

9. A hospice nurse is preparing to administer furosemide 40 mg IV. Available is furosemide 10 mg/1 mL. How many mL should the hospice nurse administer per dose?

$$\frac{40\text{mg}}{1} \times \frac{1\text{mL}}{10\text{mg}} = 4\text{mL}$$

10. A parish nurse is preparing to administer aspirin 650 mg PO every 12 hr. The amount available is aspirin 325 mg tablets. How many tablets should the parish nurse administer?

$$\frac{650\text{ mg}}{1} \times \frac{1\text{ tab}}{325\text{mg}} = 2\text{ tabs}$$