Serina Duran
DCW#4

Dosage Calculation Worksheet #4

1. Ordered is flucloxacillin 250mg IM. Available is 1 G in 10 mL. How much should the nurse administer in mL?

$$1g = 1000 \text{ mg} \qquad \frac{250mg \,(10\,mL)}{1000\,mg} = 2.5\,mL$$

$$\boxed{2.5\,mL}$$

2. Order: Administer 160 mg IV. Available is 100 mg/2 mL. How much should the nurse administer in mL?

$$\frac{160\,mg\,(2\,mL)}{100\,mg} = \boxed{3.2\,mL}$$

3. Azulfidine 1.5 g has been ordered $\overset{bid}{\text{every}}$ 12 hrs. Available are 500mg tablets. How many tablets should the nurse administer per day?

$$1.5g \times 2 = 3g = 3000\,mg$$

$$\frac{3000\,mg\,(1\,tab)}{500\,mg} = \boxed{6\,tabs}$$

4. Ergotrate maleate 200 mcg is ordered po daily. Available is 0.2 mg. How many tablets should the nurse administer?

$$1\,mg = 1000\,mcg$$

$$\frac{200mcg}{1000} = 0.2\,mg \qquad \boxed{1\,tab}$$

5. From 0700 to 1900 the nurse calculates the patient's total intravenous fluid intake as __?__ milliliters. An IV is infusing at 50 mL/hour. At 0900 the patient will receive IVPB of 125 mL for 30 minutes. What is the total amount in mL the patient will receive during this time?

7am → 7pm

7am → 9am
9am → 9:30am → 2 hrs → 100 mL
9:30am → 10:00am → 125 mL
10am → 7pm → 25 mL
7pm → 9 hrs → 450 mL.

$$100mL + 125mL + 25mL + 450\,mL$$

$$\boxed{= 700\,mL}$$

Dosage Calculation Worksheet #4

6. Solumedrol 1.5 mg/kg is ordered for a child weighing 42 lb. Solumedrol is available as 75 mg / 1 mL is available. How many mL must the nurse administer?

$\dfrac{42\,lbs}{2.2\,lb} = 19.0909$ → $\boxed{19.1\,kg}$

$1.5\,mg \times 19.1\,kg = \boxed{28.65\,mg}$

$\dfrac{28.65\,mg\,(1mL)}{75\,mg} = 0.382$

$\boxed{0.38\,mL}$ ↑

7. Give patient 17.1 mg of dopamine in 223 mL of D5W to be infused at a rate of 17,221 mcg/hr. Calculate the flow rate in mL/hr.

$\dfrac{223\,mL}{1\,hour}$

$\dfrac{17.1\,mg \to mcg \times 1000}{17100\,mcg}$

$\dfrac{17100\,mcg}{223\,mL} \times = \dfrac{17221\,mcg}{1\,hour}$

$\boxed{223\,mL/hr}$

$\dfrac{17221\,x}{17221} = \dfrac{17100}{17221} = 0.992$

↑ 1.0 hr

8. Calculate the IV flow rate for 0.2 L of D5W IV over 462 min. Infusion set has drop factor of 59 gtts/mL. What is the IV flow rate in gtts/min?

$\dfrac{0.2\,L \to mL \times 1000}{200\,mL}$

$\dfrac{200\,mL}{462\,min} \times 59\,gtts/mL = 25.54$

$\boxed{26\,gtts/min}$

9. Ordered Lasix 24 g IV push now. Available: 22,000,000 mcg in 12 mL. How much will the nurse draw up?

$\dfrac{22,000,000\,mcg \to mg}{1000} = \dfrac{22000\,mg \to g}{1000} = 22g$

$\dfrac{24g\,(12\,mL)}{22g} = 13.09$

↑ $\boxed{= 13.1\,mL}$

10. Calculate the IV flow rate for 392 mL of D5W IV over 582 min. Infusion set has drop factor of 74 gtts/mL. What is the IV flow rate in gtts/min?

$\dfrac{392\,mL}{582\,min} \times 74\,gtts/mL = 49.84$

↑ $\boxed{= 50\,gtts/min}$

7am→6pm

7am → 9am
→ 2hrs → 200mL

9am → 9:30am
→ 75mL

9:30am →10am → 50mL

10am → 3pm → 5hrs → 500mL

11. From 0700 to 1800 the nurse calculates the patient's total intravenous fluid intake as ☐ milliliters. An IV is infusing at 100 mL/hour. At 0900 and 1500, the patient will receive IVPB of 75 mL for 30 minutes. What is the total amount the patient will receive during this time?

3pm → 3:30pm → 75mL

3:30pm → 4:00pm → 50mL

4pm → 6pm → 2hrs → 200mL

200
+ 75
+ 50
+ 500
+ 75
+ 50
+ 200
1150 mL

12. Ordered 7 g of Amoxicillin. Amoxicillin is available as 0.016 kg per 20 mL. How much will the nurse draw up?

$$0.016\ kg \rightarrow g$$
$$X\ 1000$$
$$16\ g$$

$$\frac{7g\ (20mL)}{16g} = 8.75$$

$$\boxed{8.8\ mL}$$

13. Potassium chloride is available as 0.016 kg per tablet. Potassium Chloride (K-Dur), 24,000,000 mcg, is ordered. How many tablets would the nurse administer?

$$0.016\ kg \rightarrow g$$
$$X\ 1000$$
$$16\ g$$

$$24,000,000\ mcg \rightarrow mg$$
$$\frac{}{1000} = 24\ 000\ mg \rightarrow g$$
$$\frac{}{1000} = 24\ g$$

$$\frac{24g\ (1\ tab)}{16g} = \boxed{1.5\ tabs}$$

14. Aggrastat at 23.8 mg in 129 mL is to be infused at 3 mcg/kg/hr in a patient who weighs 82 kg. At what flow rate in mL/hr will you set the pump?

$$\frac{23.8\ mg}{129\ mL}$$

$$3\ mcg\ /\ 1kg$$
$$3mcg \times 82\ kg = 246\ mcg$$

hour?

$$\boxed{1.3mL/hr}$$

$$\frac{246mcg}{1000} \rightarrow mg = 0.246\ mg$$
$$\frac{}{1\ hr}$$

$$\frac{23.8\ mg}{X\ hours} = \frac{0.246\ mg}{1\ hour}$$
$$= 96.7\ hours$$

$$\frac{0.246\ X}{0.246} = \frac{23.8}{0.246} = 96.7479$$

$$\frac{129\ mL}{96.7\ hrs} = 1.33$$

$$\boxed{1.3\ mL/hr}$$

15. Administer 0.06 g of codeine po now. Available are 30 mg tablets. How many tablets should the nurse administer?

$$0.06g \rightarrow mg$$
$$X\ 1000 = 60\ mg$$

$$\frac{60\ mg\ (1\ tab)}{30\ mg} = \boxed{2\ tabs}$$