Marissa Hernandez due 10/20

Dosage Calculation Worksheet #3

1. Medication order: Heparin 25,000 units in 500 mL, infuse 4000 units/hr. How many mL per hour do you need to infuse to deliver 4000 units/hr?

25,000 units / 500 mL 500 ÷ 6.25 = **80 mL/hr**

6.25 × 4,000 units / ? mL

2. Medication order: Lidocaine 8 mg in 250 mL, infuse at 10 mcg/min. How many mL per hour do you need to infuse to deliver 10 mcg/min?

Kg g mg mcg ÷1000

10 mcg ÷ 1000 = 0.01 mg/min ×60 min/hr = 0.6 mg/hr

8 mg / 250 mL ×13.33 8 mg = 250 mL 250 ÷ 13.33 = 18.75

18.8 mL/hr

3. Medication order: Aminophylline 1 gram in 250 mL, infuse 25 mg/hr. How many mL per hour must you infuse to deliver 25 mg/hr?

Kg g mg mcg ×1000

1g = 250 mL so 1000 mg = 250 mL 250 mL ÷ 40 = 6.25 mL/hr

25 mg / hr ×40

= **6.3 mL/hr**

4. Medication on hand: Insulin 75 units in 125 mL. How many units per mL?

75 units = 125 mL 75 ÷ 125 = **0.6 units/mL**

? units / 1 mL

5. Medication order: Unipen 750 mg IM q6h. Available: Unipen 1 g/2.5 mL after it has been reconstituted. How many mL of the reconstituted solution will you administer? Round answer to the nearest tenth.

DV/H

Order: 750 mg IM q 6 hrs Available: 1g/2.5 mL or 1000 mg/2.5 mL

$\frac{750\text{ mg} \times 2.5}{1000\text{ mg}} = 1.875\text{ mL} =$ **1.9 mL**

6. A nurse is administering an antibiotic via IVPB. The pharmacy dispenses 150 milligrams (mg) of antibiotic mixed in 250 milliliters (mL) of normal saline to infuse over 30 minutes. The nurse will set the infusion pump at _____ mL/hour to administer the IVPB.

150 mg / 250 mL ×2 over 30 mins ×2

= **500 mL/hr**

7. Administer 3.5 mL of aminophylline liquid (250 mg/2.5mL) PO for pain now. The nurse will administer [1] milligrams.

order: 3.5 mL available: 250 mg / 2.5 mL

? mg = 3.5 mL

250 mg × 3.5 mL = 875

875 ÷ 2.5 = **350 mg**

8. Order: Administer cephazolin 60 mg IM daily. Available is a 5 mL vial of cephazolin 100 mg/mL. The nurse should administer how many mL?

DV/H

$\frac{60\text{ mg} \times 1\text{ mL}}{100\text{ mg}} =$ **0.6 mL**