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?

$$\frac{1,200\text{mL} \times 59\text{ gtt/mL}}{462\text{ min}} = 26\text{ gtts/min}$$

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

$$22{,}000{,}000\text{ mcg} \times \frac{1\text{ mg}}{1000\text{mcg}} = 22000\text{ mg} \times \frac{1\text{g}}{1000\text{mg}} = 22\text{g/mL}$$

$$24\text{g} \times \frac{12\text{ml}}{22\text{g}} = 13.1\text{ mL}$$

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?

$$\frac{392\text{mL} \times 74\text{ gtts/mL}}{582\text{ min}} = 49.8 = 50\text{ gtts/min}$$

11. From 0700 to 1800 the nurse calculates the patient's total intravenous fluid intake as [1] 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?

$$11\text{hrs} \times \frac{100\text{mL}}{\text{hr}} = 1{,}100\text{mL} + 75\text{mL} = 1175\text{mL}$$

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

$$7\text{g} \times \frac{1\text{kg}}{1000\text{g}} = 0.007\text{kg} \times \frac{20\text{mL}}{0.016\text{kg}} = 8.75\text{ mL}$$

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?

$$24{,}000{,}000\text{mcg} \times \frac{1\text{kg}}{1{,}000{,}000{,}000\text{mcg}} = 0.024\text{kg} \times \frac{\text{tab}}{0.016\text{kg}} = 1.5\text{ tabs}$$

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?

$$23.8\text{mg} \times \frac{1000\text{mcg}}{1\text{mg}} = 23{,}800\text{ mcg}$$

$$\frac{23{,}800\text{ mcg}}{129\text{ mL}} = 185\text{ mcg/mL}$$

$$3\text{ mcg} \times \frac{82\text{kg}}{1\text{kg}} \times \text{hr} = \frac{246\text{ mcg}}{\text{hr}} \times \frac{\text{mL}}{185\text{mcg}} = 1.3\text{ mL/hr}$$