

1. 2 mL
2. 16 mL/hr
3. 11.2 mL
4. 1400 mL
5. 0.6 mL
6. 3.8 kg
7. 70 mL/hr
8. 40.9 mL
9. 4 mL
10. 400 mL/hr

1. A nurse is preparing to administer furosemide (Lasix) 3 mg/kg/dose PO every 12 hr to an infant who weighs 15 lb. Available is furosemide oral solution 10 mg/ml. How many mL should the nurse administer per dose? (Round the answer to the nearest tenth.)

$$15 \div 2.2 \times 3 = \underline{\quad} \div 10 = 2.04545$$

Do NOT clear calculator

2 mL

2. A nurse is preparing to administer dextrose 5% in water (D5W) 9 ml/kg to infuse over 8 hours to an infant who weighs 14 kg. The nurse should set the pump to deliver how many ml/hr? (round the answer to the nearest whole number.)

$$9 \text{ mL} / 14 \text{ kg} = 126 \text{ mL total}$$

$$126 \div 8 \text{ hrs} = \boxed{16 \text{ mL/hr}}$$

3. A nurse is preparing to administer ranitidine (Zantac) 8 mg/kg/dose PO every 12 hr to an infant who weighs 46 lb. Available is ranitidine oral solution 15 mg/ml. How many mL should the nurse administer per dose? (Round the answer to the nearest tenth.)

$$46 \div 2.2 = 20.9090 \text{ kg} \times 8 \text{ mg} = 167.273$$

$$\frac{D}{H} \times V = \frac{167.273 \text{ mg}}{15 \text{ mg}} \times 1 = 11.1515 = \boxed{11.2 \text{ mL}}$$

4. A nurse is caring for an infant who weighs 18 kg. What is the infant's daily maintenance fluid requirement? (Round answer to nearest whole number.)

$$\begin{array}{r}
 10 \times 100 = 1000 \\
 8 \times 50 \quad 400 \\
 0 \times 20 \quad 0 \\
 \hline
 1400 \text{ mL}
 \end{array}$$

5. A nurse is preparing to administer morphine 0.06mg/kg IV bolus to an infant who weighs 5 kg. Available is morphine 0.5 mg/ml injection. How many mL should the nurse administer? (Round the answer to the nearest tenth.)

$$\begin{array}{l}
 0.06 \text{ mg} \times 5 \text{ kg} = 0.3 \text{ mg} \\
 \frac{D}{H} \times V \quad \frac{0.3 \text{ mg}}{0.5 \text{ mg}} \times 1 \text{ mL} = \boxed{0.6 \text{ mL}}
 \end{array}$$

6. A nurse is converting an infant's weight in lb and oz to kg. The infant weighs 8 lb 6 oz. How many kg does the infant weigh? (Round the answer to the nearest tenth.)

$$\begin{array}{l}
 1 \text{ lb} = 16 \text{ oz} \\
 1 \text{ kg} = 2.2 \text{ lbs} \\
 6 \text{ oz} = 0.375 \text{ lbs} \\
 \text{infant wt} = 8.375 \text{ lbs} \\
 \frac{8.375}{2.2} = \boxed{3.8 \text{ kg}}
 \end{array}$$

7. A nurse is preparing to administer 0.9% sodium chloride (0.9% NaCl) 20 mL/kg to infuse over 8 hours to a child who weighs 28 kg. The nurse should set the pump to deliver how many ml/hr? (round the answer to the nearest whole number.)

$$20 \text{ mL} \times 28 \text{ kg} = 560 \text{ mL} \div 8 \text{ hr} = \boxed{70 \text{ mL/hr}}$$

8. A nurse is preparing to administer dexamethasone (Decadron) 0.4 mg/kg/day PO divided in equal doses every 12 hr to a school-age child who weighs 45 lb. Available is dexamethasone oral solution 0.5 mg/5 ml. How many mL should the nurse administer per dose? (Round the answer to the nearest whole number.)

$$45 \text{ lb} \div 2.2 = 20.4545 \text{ (don't clear calculator)}$$

$$\rightarrow \times 0.4 = 8.1818 \text{ (don't clear)}$$

$$\rightarrow \text{divide by } 0.5 \text{ then multiply } \times 5 = \boxed{40.9 \text{ mL}}$$

9. A nurse is preparing to administer clindamycin hydrochloride (Cleocin) 11 mg/kg PO divided in equal doses every 8 hr to a toddler who weighs 32 lb. Available is clindamycin hydrochloride oral solution 75 mg/5 ml. How many mL should the nurse administer per dose? (Round the answer to the nearest whole number.)

$$\boxed{4 \text{ mL}}$$

10. A nurse is preparing to administer 0.9% sodium chloride 300 ml to infuse over 45 min. The nurse should set the IV pump to deliver how many mL/hr? Round to a whole number.

$$\frac{300 \text{ mL}}{0.75 \text{ hr}} = \boxed{400 \text{ mL/hr}}$$