

Dosage Calculation Worksheet #1

1. An individual is taking cough suppressant that contains codeine 10 mg in 5 mL. If the individual took 12 tsp of the medication during a 24-hour period, how many milligrams of codeine would have been taken?

$$\begin{array}{r} 12 \text{ tsp} \\ \times 5 \text{ mL} \\ \hline 60 \text{ mL} \end{array} \quad \frac{10}{5} \rightarrow \frac{x}{60} = \boxed{120 \text{ mg}}$$

2. The nurse is to give 10 mcg/kg/min of a medication. The patient weighs 80 kg. How many mcg will the nurse give in 15 minutes?

$$10 \text{ mcg} \times 80 \times 15 = \boxed{12,000 \text{ mcg}}$$

3. Calculate the individual dose in mg a medication to be administered in six divided doses if a patient weighs 35 pounds and is to be given 40 mg/kg/day. Round kg to nearest 10th.

$$\frac{35 \text{ lbs}}{2.2} = 15.9 \quad 40 \text{ mg} \times 15.9 \text{ kg} = 636 \text{ mg} \quad \frac{636}{6} = \boxed{106 \text{ mg}}$$

4. The medication order is to administer naloxone (Narcan) 1.5 mcg/kg STAT. The child weighs 36.3 pounds. How many mg of Narcan will the nurse give to the child?

$$\frac{36.3 \text{ lbs}}{2.2} = 16.5 \text{ kg} \quad \frac{1.5 \text{ mcg}}{1000} = 0.0015 \text{ mg} \times 16.5 = 0.02475 = \boxed{0.02 \text{ mg}}$$

5. An individual is taking an antibiotic that contains penicillin (PCN) 180 mg in 5 mL. If the individual took 21 tsp of the medication in 7 days, how many milligrams of PCN would have been taken?

$$\begin{array}{r} 1 \text{ tsp} = 5 \text{ mL} \\ 21 \text{ tsp} \\ \times 5 \text{ mL} \\ \hline 105 \text{ mL} \end{array} \quad \frac{180}{5} = \frac{x}{105} = \boxed{3,780 \text{ mg}}$$

6. Medication order: Cephalexin 375 mg PO tid. How many grams will the patient receive each 24 hours? = 8 times

$$D: 375 \text{ mg} \rightarrow \text{g} \quad \frac{375}{1000} = 0.375 \text{ g} \times 3 = 1.125 = \boxed{1.1 \text{ g}}$$

7. Medication order: Unipen 750 mg IM q6h

Available: Unipen add 4 mL sterile water to make 1 g/2.5 mL

How many mL of the reconstituted solution will you administer?

$$\begin{array}{l} D: 750 \text{ mg} / 1000 = 0.75 \text{ g} \\ A: 1 \text{ g} \\ V: 2.5 \text{ mL} \\ X: ? \text{ mL} \end{array} \quad \frac{0.75 \text{ g}}{1 \text{ g}} = \frac{x}{2.5 \text{ mL}} = \boxed{1.9 \text{ mL}}$$

8. Medication order: Zaroxolyn 7.5 mg PO bid. Available: Zaroxolyn 5 mg tablets. How many tablets will you administer?

$$\begin{array}{l} D: 7.5 \text{ mg} \\ H: 5 \text{ mg tab} \\ V: 1 \text{ tab} \\ X: ? \text{ tab} \end{array} \quad \frac{7.5 \times 1 \text{ tab}}{5 \text{ mg tab}} = 1.5 \times 2 = \boxed{3 \text{ tabs}}$$

9. Medication order: Erythromycin 125 mg via gastric tube tid. Available: Erythromycin 250 mg/5 mL

How many mL will you administer?

$$\begin{array}{l} D: 125 \text{ mg} \\ H: 250 \text{ mg} \\ V: 5 \text{ mL} \\ X: ? \end{array} \quad \frac{125 \times 5}{250} = 2.5 \times 3 = \boxed{7.5 \text{ mL}}$$

10. Medication order: Capoten 100 mg. Available: Capoten 0.1 g tablets. How many tablets will you administer?

$$\begin{array}{l} D: 100 \text{ mg} / 1000 = 0.1 \text{ g} \\ H: 0.1 \text{ g tab} \\ V: 1 \text{ tab} \\ X: ? \text{ tab} \end{array} \quad \frac{0.1 \times 1}{0.1} = \boxed{1 \text{ tab}}$$

11. Change 128 oz to L. Round final answer to a whole number.

$$3.789 = \boxed{4 \text{ L}}$$

12. Medication order: heparin 2500 units/hr. Drug available: heparin 20,000 units in 250 mL D5W. At what rate will you set your pump?

$$\frac{20,000}{250} = 80 \text{ units/mL} \quad \frac{2500}{80} = 31.25 \text{ mL} = \boxed{31.3 \text{ mL}}$$

13. Penicillin G Procaine (Wycillin) contains 300,000 units/mL. How many units would there be in 2.5 mL?

$$\frac{300,000}{1} = \frac{X}{2.5} \quad \boxed{750,000 \text{ units}}$$

14. The preoperative order is for atropine sulfate 0.15 mg. The supply of atropine sulfate is 0.4 mg/mL. How many mL will you prepare?

$$\begin{array}{l} D: 0.15 \text{ mg} \\ H: 0.4 \text{ mg} \\ V: \text{ mL} \end{array} \quad \frac{0.15}{0.4} = 0.375 \text{ mL} = \boxed{0.4 \text{ mL}}$$

15. Medication order: Atropine 0.4 mg Sub-Q now. Drug available: atropine 5 mg per 10 mL. How many mL will you administer?

$$\begin{array}{l} D: 0.4 \text{ mg} \\ H: 5 \text{ mg} \\ V: 10 \text{ mL} \end{array} \quad \frac{0.4 \times 10}{5} = \boxed{1 \text{ mL}}$$