

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?

$$\frac{30 \text{ mL}}{6} = \frac{60}{12} \times 5 \text{ mL} = 12 \times 10 = 120 \text{ mg}$$

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?

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

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.

$$40 \text{ mg} \times 15.9 \text{ kg} = 636/6 = 106 \text{ mg}$$

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?

$$1.5 \text{ mcg} \times 16.5 \text{ kg} = 24.75 \text{ mcg} = 0.02 \text{ mg}$$

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?

$$\frac{30 \text{ mL}}{6 \text{ TSP}} = \frac{105 \text{ mL}}{21 \text{ TSP}} \div 5 \text{ mL} = 21 \times 180 = 3,780 \text{ mg}$$

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

$$375 \text{ mg} \times 3 = 1,125 \text{ mg} = 1.1 \text{ g}$$

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?

$$\frac{750 \text{ mg}}{1,000 \text{ mg}} \times 2.5 \text{ mL} = 1.9 \text{ mL PER DOSE}$$

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

$$7.5 / 5 = 1.5 \text{ TABS}$$

9. Medication order: Erythromycin 125 mg via gastric tube tid.
Available: Erythromycin 250 mg/5 mL
How many mL will you administer?

$$\frac{125 \text{ mg}}{250 \text{ mg}} \times 5 \text{ mL} = 2.5 \text{ mL}$$

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

$$100 \text{ mg} = 0.1 \text{ g} \rightarrow 1 \text{ TAB}$$

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

$$\frac{30 \text{ mL}}{16 \text{ L}} \times \frac{1}{128 \text{ oz}} = 3,840 \text{ mL} = 4 \text{ L}$$

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?

$$\frac{2500 \text{ UNITS}}{20,000 \text{ UNITS}} \times 250 \text{ mL} = 31.3 \text{ mL}$$

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

$$\begin{array}{r} 300,000 \text{ UNITS} \\ \times 2.5 \text{ mL} \\ \hline 750,000 \text{ UNITS} \end{array}$$

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?

$$\frac{0.15 \text{ mg}}{0.4 \text{ mg}} \times 1 \text{ mL} = 0.38 \text{ mL} \rightarrow 0.4 \text{ mL}$$

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

$$0.4 \text{ mg} / 5 \text{ mg} \times 10 \text{ mL} = 0.8 \text{ mL}$$