

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?

$$\frac{10 \text{ mg}}{5 \text{ mL}} = \frac{x}{12 \text{ tsp}} = 10 \times 12 = \boxed{120 \text{ mg}}$$

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?

$$10 \text{ mcg} \times 80 \text{ kg} = 800 \times 15 \text{ min} = \boxed{12,000 \text{ mcg}}$$

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.

$$35 \text{ lbs} \div 2.2 = 15.9$$

$$15.9 \times 40 = 636 \div 6 \text{ doses} = \boxed{106 \text{ mg}}$$

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?

$$1 \text{ g} = 1000 \text{ mg}$$

$$1.5 \div 1000 = 0.0015 \times 16.5 \text{ kg} = 0.02475$$

$$36.3 \div 2.2 = 16.5 \text{ kg}$$

$$= \boxed{0.024 \text{ mg}}$$

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?

$$105 \text{ mL} / 5 \text{ mL} = 21$$

$$21 \text{ tsp} = 105 \text{ mL}$$

$$180 \times 21 = \boxed{3,780 \text{ mg}}$$

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

$$1 \text{ g} = 1000 \text{ mg}$$

$$375 \div 1000 = 0.375 \text{ g} \times 3 = \boxed{1.125 \text{ g}}$$

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?

$$1 \text{ g} = 1000 \text{ mg}$$

$$\frac{750 \times 2.5}{1000} = \boxed{1.875 \text{ mL}}$$

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

$$\frac{7.5 \times 1}{5 \text{ mg}} = 1.5 \text{ tablets}$$

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

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

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

1g = 1000mg
0.1 x 1000

$$\frac{100 \text{ mg} \times 1}{100} = 1 \text{ tablet}$$

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

$$1 \text{ L} = 32 \text{ oz} \quad 128 \div 32 = 4 \text{ L}$$

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?

$$\frac{2500 \times 250}{20,000} = 31.25 \text{ units/hr}$$

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

300,000 units = 1 mL

$$300,000 \times 2.5 \text{ mL} = 750,000 \text{ units}$$

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?

$$\frac{0.15 \text{ mg} \times 1 \text{ mL}}{0.4 \text{ mg}} = 0.375 \text{ mL}$$

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

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