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?

   120 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?

   12,000 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.

   106 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?

   0.025mg

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?

   3,780mg

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

   1.1g

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?

   1.9 mLL

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

1.5 tablets per dose
3 tablets per day

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

2.5 mL per dose
7.5 mL per day

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

1 tablet

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

4 Liters

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?

31.25 units/hr

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

750,000 units / 2.5 mL

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?

0.38 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?

0.8 mL

1. 12 tsp = $\overset{60}{?}$ mL   12 × 5 = 60mL

$$\frac{10 \text{ mg}}{5 \text{ mL}} = \frac{x}{60 \text{ mL}}$$

$$\frac{600}{5} = \frac{5x}{5}$$

$$\boxed{x = 120 \text{ mg}}$$

2. 10 mcg/kg/min
   80 kg

   80 × 10 = 800 mcg
   $\underline{\times \text{ 15 minutes}}$
   $\boxed{12,000 \text{ mcg}}$

3. 40 mg/kg/day
   35 lbs = 15.9 kg

   40 × 15.9 = 636 mg/day

   636 ÷ 6 equal doses = $\boxed{106 \text{ mg per single dose}}$

4. 1.5 mcg/kg $\cancel{0.015}$ 0.0015
   36.3 lbs = 16.5 kg

   0.0015 × 16.5 = 0.02475 = $\boxed{0.025 \text{ mg}}$

5. 180 mg/5 mL (PCN)
21 tsp = 21 × 5 = 105 mL

$$\frac{180\ mg}{5\ mL} = \frac{X\ mg}{105\ mL}$$

$$\frac{18,900}{5} = \frac{5X}{5}$$

X = 3,780 mg

6. 375 mg PO tid

375 × 3 = 1,125 mg $\overset{\div 1000}{}$ 1.125 g

1.1 g

7. 750 mg
   1g/2.5 mL $\frac{D}{H} \cdot V = X$

$$\frac{0.750}{1} \cdot 2.5 = 1.875\ mL \quad 1.88\ mL$$

8. 7.5 mg PO bid.
   5 mg/1 tab $\frac{D}{H} \cdot V = X$

$$\frac{7.5}{5} \cdot 1 = 1.5\ tab\ per\ dose \quad 1.5 \times 2 = 3$$
   3 tab per day

9. 125 mg tid
   250 mg/5 mL

$$\frac{125}{250} \cdot 5 = 2.5\ mL\ per\ dose \quad 2.5 \times 3 = 7.5$$
   7.5 mL per day

10. 100. mg = 0.1 g

0.1 g / 1 tablet

0.1 × 1000 = 100 mg

$\frac{100}{100} \cdot 1 = $ (1 tablet)

11. 128 oz = ? L

1 L = 32 oz

128 ÷ 32 = (4 L)

12 2500 units/hr

20,000 units / 250 mL

$\frac{2,500}{20,000} \cdot 250 = $ (31.25 unit/hr)

13 300,000 units/mL

? units / 2.5 mL

300,000 × 2.5 = (750,000 units)

14. 0.15 mg

0.4 mg/mL

$\frac{0.15}{0.4} \cdot 1 = 0.375$ mL = (0.38 mL)

15. 0.4 mg

5 mg / 10 mL

$\frac{0.4}{5} \cdot 10 = $ (0.8 mL)