

# Dosage Calculation Worksheet #1

1) D: 12 tsp  
H: 10 mg / 5 mL

$$12 \text{ tsp} (5) = 60 \text{ mL}$$
$$(10) \frac{D \cdot V}{H} = 60 (10)$$
$$\frac{D \cdot 5}{10} = \frac{600}{5} \quad | \quad D = 120 \text{ mg}$$

2) D: 10 mcg / kg / min W: 80 kg 15 min?

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

3) D: 40 mg / kg / day W: 35 lbs = 15.9 kg

$$40 \text{ mg} / 15.9 = 2.5157 \div 6 = \boxed{106 \text{ mg}}$$

4) D: 1.5 mcg / kg STAT W: 36.3 lbs = 16.5 lbs

$$1.5 \times 16.5 = 24.8 \text{ mcg} = \boxed{0.0248 \text{ mg}}$$

5) D: 180 mg / 5 mL 21 tsp in 7 days

$$21 \text{ tsp} (5) = 105 \text{ mL}$$
$$(180) \frac{D \cdot 5 \text{ mL}}{180 \text{ mg}} 105 \text{ mL} (180) = \frac{189,000}{5} = \boxed{3780 \text{ mg}}$$

6) D: 375 mg PO tid q / 24 hr

$$375 \times 3 = 1125 \text{ mg} = \boxed{1.125 \text{ g}}$$

7) D: 750 mg IM QqH  
H: add 4 mL sterile water > 1 g / 2.5 mL

$$\frac{750 \cdot 2.5}{1000} = \boxed{1.9 \text{ mL}}$$

8) D: 7.5 mg PO BID H: 5 mg tab

$$\frac{7.5}{5} = 1.5 \text{ tab, if the tablets can be split, if they cannot, then 0 would be administered}$$

9) D: 125 mg TID  
H: 250 mg / 5 mL

$$\frac{125 \cdot 5}{250} = \boxed{2.5 \text{ mL}}$$

10) D: 100 mg  
H: 0.1 g

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

11) 128 oz  $\rightarrow$  L

$$128(2) = 256 \text{ Tbsp } (3) = 768 \text{ tsp } (5) = 3840 \text{ mL} = \boxed{3.84 \text{ L}}$$

12) H:  $\frac{20,000 \text{ units}}{250 \text{ mL}} = 80 \text{ units/mL}$      $\frac{2500 \text{ unit/hr}}{80 \text{ unit/mL}} = \boxed{31.3 \text{ mL/hr}}$

13) D: 300,000 units/mL. Units in 2.5 mL

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

14) D: 0.15 mg  
H: 0.4 mg/mL

$$\frac{0.15 \text{ mg} \cdot 1 \text{ mL}}{0.4 \text{ mg}} = \boxed{0.38 \text{ mL}}$$

15) D: 0.4 mg sub-Q now  
H: 5 mg / 10 mL

$$\frac{0.4 \text{ mg} \cdot 10 \text{ mL}}{5 \text{ mg}} = \boxed{0.8 \text{ mL}}$$

due Oct 5

## 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 10<sup>th</sup>.

106 mg

- Round* 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?

0.0248 mg or 0.02 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?

3780 mg

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

1.125 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?

1.9 mL

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

1.5 if the tablet can be cut, if they cannot, then 0 would be administered

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

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.

3.84 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?

31.3 mL/hr

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

750,000 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?

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