Dosage Calculation Worksheet #1

1 tsp = 5mL

* 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?

12 x 10 = 120 12 tsp x 5mL = 60mL in 24hrs.

?mg = 60mL

120mg = 60mL

* 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 x 80 = 800mcg/min.

800mcg x 15 = 12,000mcg

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. 35lbs ÷ 2.2 = 15.9

15.9 x 40mg = 636/day

636 ÷ 6 = 106mg .02 1.5

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? 36.3 ÷ 2.2 = 16.5 kg .0248

16.5 x 1.5 = 24.8mcg .0248

.02mg

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?

1 tsp = 5mL

21 tsp x 5 = 105mL in 7 days

?mg = 105mL 180mg x 21 = 3,780mg.

180mg = 5mL

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

.375 x 3 = 1.13 1.1mg

7. Medication order: Unipen 750 mg IM q6h 1,000mg.

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

How many mL of the reconstituted solution will you administer?

$\frac{750mg}{1000mg} \times 2.5mL = 1.875 = 1.9mL$

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

$\frac{7.5\text{mg}}{5\text{mg}} \times 1\text{ tab} = 1.5\text{ tabs.}$

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? 0.100 100mg.

$\frac{100\text{mg}}{100\text{mg}} \times 1\text{ tab} = 1\text{ tab.}$

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

$128 \times 30 = 3840\text{mL}$ 3840

3.84L

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?

$\frac{2500\text{units}}{20{,}000\text{units}} \times 250\text{mL} = 31.3\text{units/hr}$

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

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

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

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