Natalie Martinez

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?

$12 \cdot 10 = 120$

$5\sqrt{\overline{60}}^{\;12}$

1 tsp → 5 mL

12 tsp → 60 mL

$\boxed{120 \text{ milligrams}}$

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?

$80 \times 10 = 800$

$800 \times 15 = 12,000$

$\boxed{12,000 \text{ mcg}}$

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.

$\boxed{106 \text{ mg}}$

$35 \div 2.2 = 15.9$

$40 \cdot 15.9 = 636 \text{ a day}$

$636 \div 6 = 106$

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?

$24.75 \text{ mcg} \cdot \dfrac{.001 \text{ mg}}{1 \text{ mcg}} =$

$36.3 \div 2.2 = 16.5$

$16.5 \cdot 1.5 = 24.75 \text{ mcg}$

$\boxed{0.02 \text{ mg}}$

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?

$\boxed{3,780 \text{ mg}}$

1 tsp → 5 mL

21 tsp → 105 mL

$105 \div 5 = 21$

$21 \cdot 180 = 3780$

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

$375 \text{ mg} \cdot \dfrac{1 \text{ gram}}{1000 \text{ mg}} = \dfrac{375}{1000} = 0.375 \cdot 3 = 1.125$

$\boxed{1.1 \text{ grams}}$

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?

$750 \text{ mg} \cdot \dfrac{2.5 \text{ mL}}{1000 \text{ mg}} = \dfrac{1875}{1000} = 1.875$

$\boxed{1.9 \text{ mL}}$

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

$7.5 \cdot 2 = 15 \, mg$

3 tablets

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

$125 \, mg \cdot \dfrac{5 \, mL}{250 \, mg} = \dfrac{625}{250} = 2.5$

2.5 mL

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

$0.1 \, g \cdot 1000 = 100 \, mg$

1 tablet

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

$30 \, mL = 1 \, oz$ $3840 \, mL \rightarrow L$

$3,840 \, mL = 128 \, oz$ $3840 \div 1000 = 3.84$

4 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?

$2500 \, units \cdot \dfrac{250 \, mL}{20,000 \, units} = \dfrac{625,000}{20000} = 31.25 \, mL = 31.3$

31.3 mL

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

$300000 \times 2.5 = $ 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?

$0.15 \, mg \cdot \dfrac{1 \, mL}{0.4 \, mg} = 0.375$

0.4 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?

$0.4 \, mg \cdot \dfrac{10 \, mL}{5 \, mg} = \dfrac{4}{5} = 0.8$

0.8 mL