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# 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?

$\frac{D}{H} \times mg$ $\frac{60mL}{5mL} \times 10mg = 120mg$ 120mg

$\frac{10mg}{5mL} \times \frac{x}{60mL}$

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?

10mcg(80)(15min) = 12,000mcg in 15min

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. 40mg(15.9)/day = 636mg/6

106mg/dose

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?

1.5 mcg % 1000 = 0.0015 Narcan = 1.5mcg/kg STAT

0.0015mg(16.5) = 0.02475mg STAT

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?

21tsp = 105mL 1tsp = 5mL

$\frac{D}{H} \times mg.$ $\frac{105mL}{5mL} \times 180mg =$ 3,780mg/7 days

21tsp $\frac{21}{\times 5}$ / 105

105mL/5mL = 21

6. Medication order: Cephalexin 375 mg PO tid. How many grams will the patient receive each 24 hours? 375mg/1000 = 0.375g

0.375g x 3 = 1.1g/day

7. Medication order: Unipen 750 mg IM q6h

Available: Unipen ~~add 4 mL sterile water~~ to make 1 g/2.5 mL 1g x 1000 = 1000mg

How many mL of the reconstituted solution will you administer?

$\frac{750mg}{1000mg}(2.5mL) = 1.875mL \rightarrow$ 1.9mL

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

$\frac{7.5mg\ (1\ tablet)}{5mg} = 1.5\ tablet$

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

$\frac{125mg\ (5mL)}{250mg} = 2.5mL$

$2.5 \times 3 = 7.5mL$

7.5mL

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

$\frac{100mg\ (1\ tablet)}{0.1g \Rightarrow 100mg} = 1$

1 tablet

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

$1oz = 30mL \quad 3{,}840 \quad 1L = 1000mL$

$3{,}840mL = 4L$

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?

$\frac{2500\ units\ (250mL)}{20{,}000\ units} = 31.25$

31mL/HR

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

$300{,}000\ units/mL$

$300{,}000 \times 2.5mL =$

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?

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

0.375mL

↳ 0.4mL

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

$\frac{0.4mg\ (10mL)}{5mg}\ 4/5 = 0.8$

0.8 mL