

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?

$$10\text{mg}/5\text{mL}$$

$$12\text{tsp} - \text{mL} = 60\text{mL}, \quad 5\text{mL into } 60\text{mL is } 12$$

$$12 \times 10 = \mathbf{120\text{mg of codeine would be taken}}$$

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?

$$10\text{mcg} \times 80 \text{ kg} \times 15\text{minutes} = \mathbf{120,000\text{mcg}}$$

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.

$$35\text{lb} = 15.9\text{kg}$$

$$40\text{mg} \times 15.9\text{kg} = 636\text{mg}$$

$$636\text{mg} / 6 = \mathbf{106\text{mg}}$$

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?

$$36.3\text{lbs} = 16.5\text{kg}$$

$$1.5\text{mcg} \times 16.5\text{kg} = 24.75\text{mcg}$$

$$24.75\text{mcg} / 1000 \text{ to get mg} = \mathbf{0.02 \text{ mg}}$$

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?

$$180\text{mg}/5\text{mL} = 180\text{mg}/1\text{tsp}$$

$$21\text{tsp} \times 180\text{mg} = \mathbf{3780\text{mg in 7 days}}$$

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

$$375\text{mg} \times 3 = 1125\text{mg for 24hours}$$

$$1125\text{mg} / 1000 = \mathbf{1.1 g}$$

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?

$$1\text{g} = 1000\text{mg}$$

$$750\text{mg} / 1000\text{mg} \times 2.5\text{mL} = \mathbf{1.9\text{mL per dose}}$$

0.475mL every 6 hrs for 24hrs

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

$$7.5\text{mg} / 5\text{mg} = \mathbf{1.5 tablets per dose}$$

$$1.5\text{tablets} \times 2 = \mathbf{3 tablets daily}$$

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

$$125\text{mg} / 250\text{mg} \times 5\text{mL} = \mathbf{2.5\text{mL per dose}}$$

$$2.5\text{mL} \times 3 = \mathbf{7.5\text{mL daily}}$$

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

$$0.1\text{g} = 100\text{mg} = \mathbf{1 tablet}$$

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

$$128\text{oz} = \mathbf{4L}$$

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?

$$2500\text{units/hr} / 20,000\text{units} \times 250\text{mL} = \mathbf{31.25 mL/hr}$$

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

$$300,000\text{units/mL} \times 2.5\text{mL} = \mathbf{750,000\text{units}}$$

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?

$$0.15\text{mg} / 0.4\text{mg} \times 1\text{mL} = \mathbf{0.375\text{mL}}$$

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

$$0.4\text{mg} / 5\text{mg} \times 10\text{mL} = \mathbf{0.8\text{mL}}$$