Abigail Lara

$\frac{D}{H} \times V$

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?

H: 10mg/5mL $12\,tsp \times \frac{5mL}{1\,tsp} = 60mL$

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

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?

$10 \times 80kg = 800mcg \times 15min =$ 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 10th.

$35\,lbs \times \frac{1kg}{2.2lbs} = 15.9kg \times 40mg = 636mg \div 6 =$ 106mg per 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?

D: 1.5mcg/kg $1.5mcg \times \frac{1g}{1,000,000mcg} \times \frac{1,000mg}{1g} = 0.0015mg$

$36.3lbs \times \frac{1kg}{2.2lbs} = 16.5kg \times 0.0015mg = 0.025mg \rightarrow$ 0.03mg

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?

H: 180mg/5mL $21\,tsp \times \frac{5mL}{1\,tsp} = 105mL$

$\frac{180mg}{5mL} \times \frac{3,780}{105mL} =$ 3,780 mg

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

$375mg \times 3 = 1,125mg \times \frac{1g}{1,000mg} = 1.125g \rightarrow$ 1.1g

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?

H: 1g/2.5mL $750mg \times \frac{1g}{1,000mg} = 0.75g$ $\frac{0.75g}{1g} \times 2.5mL =$ 1.9mL

D: 750mg

Abigail Lara

$\frac{D}{H} \times V$

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

D: 7.5mg
H: 5mg/tab

$\frac{7.5mg}{5mg} \times tab = 1\frac{1}{2}$ tablets

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

D: 125mg
H: 250mg/5mL

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

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

D: $100mg \times \frac{1g}{1,000mg} = 0.1g$
H: 0.1g/tab

$\frac{0.1g}{0.1g} \times tab = 1tab$

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

$128oz \times \frac{30mL}{1oz} \times \frac{1L}{1,000mL} = 3.84L \rightarrow 4L$

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?

D: 2500units/hr
H: 20,000u/250mL

$\frac{2500}{1hr} \times \frac{20,000units}{250mL} = 200,000units$

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

$2.5mL \times \frac{300,000u}{1mL} = 750,000$ 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?

D: 0.15mg
H: 0.4mg/mL

$\frac{0.15mg}{0.4mg} \times mL = 0.375 \rightarrow 0.38mL$

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

D: 0.4mg
H: 5mg/10mL

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