

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?

$$1 \text{ tsp} = 5 \text{ mL}$$

$$12 \text{ tsp} = 60 \text{ mL}$$

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

$$\frac{60}{10} \times \frac{5}{10} = 120 \text{ mg}$$

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?

$$\begin{array}{r} 80 \\ \times 10 \\ \hline 800 \end{array}$$

$$\begin{array}{r} 800 \\ \times 15 \\ \hline 12000 \end{array}$$

12000 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 10<sup>th</sup>.

$$\begin{array}{r} 35 \\ \times 2.2 \\ \hline 77 \text{ kg} \end{array}$$

$$\begin{array}{r} 77 \\ \times 40 \\ \hline 3080 \text{ mg} \end{array}$$

~~3080~~  
3080 mg  
513.3 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?

$$\begin{array}{r} 36.3 \\ \times 2.2 \\ \hline 79.9 \end{array}$$

$$\begin{array}{r} 79.9 \\ \times 1.5 \\ \hline 119.85 \text{ mcg} \end{array}$$

0.12 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?

3780 mg

$$\begin{array}{r} 180 \text{ mg} \\ \times 21 \\ \hline 3780 \text{ mg} \end{array}$$

5 mL = 1 tsp → 5 mL

~~36~~  $\times 21$

~~756 mg~~  $\times 21$

180  $\times 21$

3780 mg

756 mg

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

375

$$\begin{array}{r} 375 \text{ mg} \\ \times 3 \\ \hline 1125 \end{array}$$

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?

750

$$\frac{0.75 \text{ g}}{1 \text{ g}} \times \frac{1 \text{ g}}{2.5 \text{ mL}} = 0.3 \text{ mL}$$

1.9 mL

Round child meds → 100<sup>th</sup>

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

$$\begin{array}{r} 7.5 \\ \times 2 \\ \hline 15 \end{array}$$

$$5 \overline{)15}$$

3 tablets

or 1 1/2 twice if they can be split

9. Medication order: Erythromycin 125 mg via gastric tube tid. Available: Erythromycin 250 mg/5 mL

How many mL will you administer?

$$\frac{250}{5} \rightarrow \frac{125}{2.5}$$

2.5 mL

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

100

1 tablet

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

$$\frac{1 \text{ oz}}{30 \text{ mL}} \times 128 = \frac{128 \text{ oz}}{3840 \text{ mL}}$$

$$\frac{3840}{3.84} \rightarrow 4 \text{ L}$$

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?

★ Couldn't decide which formula to use!

$$\frac{\text{rate}}{T} = \text{rate}$$

$$\frac{250 \text{ mL}}{1 \text{ hr}} = 250 \text{ mL/hr}$$

$$\frac{2500}{20000} = \frac{250}{x} \rightarrow x = 200$$

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

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

$$\frac{750,000}{2.5}$$

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?

$$\frac{0.15 \text{ mg}}{0.4 \text{ mL}}$$

$$\frac{0.4 \text{ mg}}{1 \text{ mL}}$$

$$.4 \overline{)0.15} = .375 \rightarrow .4 \text{ mL}$$

.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?

$$\frac{0.4}{.8} = \frac{5}{10}$$

.8 mL