1oz = 30mL = 2T = 6t

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?

120 mg of codeine

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?

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 10th.

106 mg per 1 individual 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?

0.02 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 taken

by math 3X a day

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

1125 mg / 1000 = 1.125 → 1.13 g

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?

1.9 mL

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

per dose?

scored or unscored?

1.5 tabs

2 tabs

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

mg in 5
period,

2.5 mL per 1 dose

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

$\frac{100\text{ mg}\ (1\text{ tab})}{100\text{ mg}} = 1\text{ tablet}$

1g = 1000 mg

0.1 g (1000) = 100 mg

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

4 liters

$128/32 =$

1L = 32 oz

So $\frac{128\text{ oz}}{(X)\text{ Liters}} = \frac{32\text{ oz}}{1\text{ L}}$

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?

$\frac{20{,}000\text{ units}}{250} = 80\text{ units per mL}$

So 31.25 mL/hour → 31.3 mL/hr

$\frac{2500}{80} = 31.25$ mL/hr

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

300,000 units per 1 mL

$\frac{300{,}000\text{ units}}{1\text{ mL}} = \frac{X\text{ units}}{2.5\text{ mL}} = 750{,}000\text{ units}$

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?

less than 1

$\frac{0.15\text{ mg}\ (1\text{ mL})}{0.4\text{ mg}} = 0.375 = 0.38\text{ mL}$

round

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

0.8 mL

1 oz = 30 mL = 2T = 6t

1 L = 32 oz 1 mL = 15 drops (gtt)

1) Dosage calculations #1

$\frac{DV}{H}$ 10 mg in 5 mL

- 12 tsp total of med

$\frac{12\ tsp}{x\ (mL)} = \frac{6t}{30\ mL}$

$\frac{6x}{6} = \frac{360}{6} = 60\ mL$ total

10 mg in 5 mL

X 60 mL

$5x = 10(60)$

$\frac{5x}{5} = \frac{600}{5} = 120\ mg$

$\frac{60\ mL}{10}$ (5)

$\frac{120\ mg}{10\ mg}\ (5\ mL) = 60\ mL$ of med

2) 80 kg → lbs

80(2.2) = 176 lbs

10 mcg / 1 kg / 1 min

(X) 80 kg

800 mcg / 80 kg / 1 min

x15

12,000 mcg / 80 kg / 15 min?

3) 35 pound → kg
35 / 2.2 = 15.909090 kg
↑
15.9 kg

40 mg / kg / day

40 mg (15.9) = 636 mg / 1 day
636 / 6 = 106 mg per 1 dose

4) 1.5 mcg / kg

36.3 pounds → kg
36.3 / 2.2 = 16.5 kg ✓

16.5 (1.5 mcg) per 1 kg
(X) mcg per 16.5 kg

24.75 mcg per 16.5 kg
↳ mg

1 mg = 1000 mcg

24.75 / 1000 = 0.02475 mg
↑

5) 180mg in 5mL

D = 21 tsp

$\frac{21\text{ tsp}}{x\text{ mL}} = \frac{6\text{ tsp}}{30\text{ mL}}$

$\frac{6x}{6} = \frac{630}{6}$

$x = 105$ mL total

$\frac{180\text{ mg}}{5\text{ mL}} = \frac{x\text{ mg}}{105\text{ mL}}$

$\frac{5x}{5} = \frac{18900}{5} = 3780$ mg

6) 375mg by mouth 3x a day

$\times 3$

1125 mg for 1 day

7) 750 mg intramuscularly every 6 hours

avail) 1g / 2.5mL

1g = 1000 mg $\quad \frac{750\text{ mg}\ (2.5\text{mL})}{1000\text{ mg}}$

$= 1.875$ mL

8) 7.5mg by mouth 2x a day
avail) 5mg per 1 tab

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

9) 125mg 3x a day
avail) 250mg/5mL

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

15) $\frac{0.4\text{mg}\ (10\text{mL})}{5\text{mg}} = 0.8\ \text{mL}$