

In class applications

1- Rx

Digoxin 30 mg
Calcium carbonate qs ad 30 g
M. ft div. Charts # 100

What is the ratio strength of digoxin in the powder?

2- Rx

Calamine 80 g
Zinc Oxide 80 g
Glycerin 20 mL
Bentonite Magma 250
mL Lime water QSAD1000 mL

What is the percentage of glycerin (v/v) in the lotion?

3- Benadryl



- What is the percentage of Diphenhydramine HCl in the above syrup?
- If the above syrup weighs 130 grams, calculate the specific gravity.

4- A doctor prescribed 200 ml of Potassium Permanganate Solution 0.2%w/v

Rx

Potassium Permanganate
Freshly boiled and cooled purified water

- How many milligrams of Potassium Permanganate is needed to fill this prescription?
- Express Potassium Permanganate in ratio strength?

- 5- Express Penicillin V concentration as ratio strength.

Rx

Penicillin suspension 150 mg/5 ml

Sig. tsp i qid x 10 d

- 6- A pharmacist would like to compound 30 grams of 0.2% nitroglycerin ointment from Nitro-Bid ointment. He is remembering vaguely that he should add 3 grams of Nitro-Bid ® ointment with 27 grams diluents but not sure. Is the calculation correct?



- 7- What is the percent weigh- volume [% (w/v)] of 200 grams of dextrose dissolved in 920 mL of water to make a final volume of 1000 mL? How many milliliters of the above solution are needed to prepare 1L of 1:40 w/v dextrose solution?
- 8- A medication is available in a 200mg/5ml strength. A prescription calls for 150mg bid x 10d. How many mL are needed for a single dose? And how many milliliters total prescription volume does the pharmacist need to dispense?
- 9- What is the percent concentration (weight/volume) of Cefaclor in the bottle dispensed by the pharmacist?
- Rx Cefaclor oral suspension 187 mg/5 mL**
Sig. 1 tsp. bid
Disp. 100 mL
- 10- A solution has ratio strength of 1:4000 (w/v). What is the percent weight-volume [(w/v) %] of the solution? Express the concentration as mg% and mg/dL
- 11- How would you compound 120 mL of Omeprazole 10-mg/tsp oral suspension from the following product? What is the percentage strength?



12- Rx

Aspirin	5 parts
Acetaminophen	5 parts
Starch qs ad	25 parts
Mix et ft 500 mg caps DTD 60 capsules	

How many grams of each ingredient are required to make 60 capsules? What is ratio strength of Aspirin? If the source of aspirin is aspirin tablets 300 mg, how many tablets should be used to fill the prescription?

13- If you have a trituration (solid in solid mixture) of morphine with ratio strength of 1:7 how many mg of the trituration will provide you with 25 mg of morphine? What is the ratio strength