**Veterinary Science Math Question Bank**

*These are sample questions for test questions to be pulled from.*

Note: Contest hosts are to change numbers and create new questions, with same format. Please do not copy exact questions plus numbers here. We want to prohibit straight memorization of questions.

1. Your patient needs 1.5 g of a drug that is available as 750 mg/capsule. How many tablets will be dispensed if treatments are BID for ten days?

40

1. A doctor orders 75 mg of Demerol IM every 4 hours for pain. It is available in 50 mg/ mL. How much should be injected over a 24-hour period?

9 mL

1. A dog develops a hot spot and the veterinarian feels the best way to treat it is to use Prednisone (a steroid). Tablets contain 5 mg/tablet. The dog weighs 75 lbs and the recommended dosage is 5 mg /25 lbs. How many tablets will be given over five days if the medication is to be given OD?

15 tablets

1. Green Apple shampoo can be bought in 5 gallon pails. If a groomer uses 16 oz bottles to hold shampoo, how many bottles can he get out of the 5 gallon pail?

40 bottles

1. A German Shepherd weighs 46.7 kg. What is his weight in pounds?

102.7 lbs

1. A sick cat weighs 3.5 kg. You must give it 20 mg/lb of a drug QID. What is the total dose?

616 mg

1. A cow has a fever of 105 oF. What is her temperature in Celsius?

40.5oC

1. Atropine is given at a dosage of 0.01 mg/lb of body weight. If the concentration is 0.5 mg/mL, how many mL should you give a 12 kg beagle?

.53 mg

1. Nolvasan solution is prepared by adding 1 oz per gallon of water. If a mop pail holds 40 quarts of water and you want to fill it, how many tablespoons of Nolvasan should be used to get the proper dilution?

20

1. When making 1200 mL of a 3% Lysol solution, how many grams of Lysol are used?

36 g

1. You regularly order six 10-ml vials per month of a drug that has a concentration of 50 mg/ml. Now that same drug is only available in 20-ml vials of 10 mg/ml. How many vials should you order this month?

15 vials

1. The veterinarian orders 4.4 mg/kg of Carprofen for pain control divided into two equal daily doses for a 50-lb dog. On hand are 100-mg scored tablets. How many tablets is/are administered each morning and afternoon?

.5 tablets in the morning and afternoon

1. How many mgs of a drug should be given to a patient weighing 22 lb if the dose is 0.2 mg/kg?

2 mg

1. Matt brings his newborn foal, Chayleigh in for dehydration. Chayleigh weighs 110 lb. The veterinarian instructs the technician to administer fluids at the rate of 70 ml/kg/24 hours. What is the total volume Chayleigh should receive in 24 hours?

3500 ml per 24 hours

1. From the question above, calculate Chayleigh’s rate in drops/minute. Your clinic uses 10 drop/mL drip set for fluid administration. Round to the nearest whole drop.

24 drops/minute

1. How many milliliters (mL) are in 6 ounces (oz) of liquid?

180 mL

1. The veterinarian has asked you to calculate the pulse/heart rate for an animal in the clinic. You monitor the animal for 20 seconds and measure 23 beats in the 20 second time period. What is the pulse/heart rate for the animal?

69 bpm

1. The doctor’s order reads: “Amoxicillin 225 mg p.o., q12 hrs.” The bottle from pharmacy is labeled: “250 mg = 5 ml.” How many milliliters would you give per dose?

4.5 ml

1. Indicate the number of tablets prescribed for the following order:

Rx: Metronidazole tablets 50 mg

Sig: 2 tablets, P.O., BID x 10 days

40 tablets

***Use the following statement to answer questions 20-23***

Mrs. Kidd brings in her dog, Killer. Dr. Peelman has diagnosed Killer with a urinary tract infection. She has prescribed SMZ-TMP. Killer is Chow and weighs 70 lbs. The dose is 30 mg/kg once

every 12 hours. Killer will need to be treated for 10 days. Each tablet costs $0.75 and there is a one-time dispensing fee of $7.50

1. What is Killer’s weight in kilograms?

31.8kg

1. How many tablets per dose will be given to Killer?

2

1. How many tablets will need to be sent home for Killer’s entire course of treatment?

40

1. What is the total medication cost to Mrs. Kidd?

. $37.50

***Use the following image to answer questions 24-25:***



1. How many total milligrams are in the bottle?

2250mg

 25. The recommended dose in milligrams for a 12 kg dog is:

52.8mg