

2022 National FFA Veterinary Science CDE Math Practicum

*****IDENTIFY ALL UNITS OF MEASUREMENT IN YOUR ANSWERS*****

Perform the calculations and write your answer on the provided answer sheet. Round to the nearest tenth unless directed otherwise in the question. If an answer is less than 1, your answer must include a leading 0 (zero).

1. A Great Dane that weighs 110 pounds weighs how much in kilograms?
2. Your client is instructed to give her dog 30ml of an oral suspension by mouth once a day. What household measurement is equivalent to 30ml?
3. A prescription reads give 2 tablets q8h. How many tablets will you administer in a 24-hour period?
4. If each tablet from the previous question cost \$1.15 per tablet. How much will one day of tablets cost?
5. Phenobarbital elixir comes in 4 mg/ml. How many milliliters are needed to deliver 7.5 mg?
6. The veterinarian orders an antibiotic 800 mg po q4. The antibiotic comes in 400 mg tablets. How many tablets will you administer per dose?
7. The veterinarian has ordered the antibiotic from the previous question to be given for 5 days. How many tablets for the whole treatment?
8. Heidi, a black Labrador Retriever, weighs 65 pounds. She has come into your clinic for a ProHeart® injection. The dosage for ProHeart® is 0.05 ml/kg. How many milliliters will Heidi be given?
9. Zoey, a pet ferret, comes in for a routine checkup. Zoey weighs 3.2 pounds. You must convert her weight to grams to enter into your clinic's electronic record keeping system. How much does Rosie weigh in grams?

Mrs. Glenn brings one of her barn cats into your clinic for treatment of a cat bite abscess. Because the cat is a barn cat, he is not overly friendly and sometimes disappears for days at a time. Mrs. Glenn does not have a place to lock him up for ongoing treatment, so the veterinarian orders you to administer Convenia® before the cat wakes up. Convenia® is an antimicrobial that will stay in the cat's system for 7 days to treat the abscess.



- Label dose for dogs and cats = 3.6 mg/lb

10. What route will you give Convenia®?

11. The barn cat weighs 12 pounds. How many milligrams of Convenia® will he need?

12. How many milliliters of Convenia® will the barn cat need?

2022 Suggested Resale Price

Price per Vial = \$359.45 | Price per mL = | Price per lb = \$1.62

13. According to the suggested resale price, what is the price per ml?

14. How much will you charge Mrs. Glenn for the Convenia® injection based on the suggested resale price?

$$\text{markup} = \frac{\text{profit}}{\text{cost} * 100\%}$$

15. If the clinic is purchasing Cerenia® at a cost of \$8.09 but selling it at a cost of \$48.09 what is the estimated markup of the product?