

Veterinary Science

Math Practicum 2026

1. A dog weighs 22 pounds and needs 50 mg of medicine per kilogram of body weight each day. The dog will take the medicine for 4 days. Each tablet contains 100 mg, and each tablet costs 25 cents. How much will the total prescription cost?

- A. \$6.00
- B. \$5.00
- C. \$4.00
- D. \$8.00

Scenario for Questions 2-4

A client has a yellow Labrador retriever named that weighs 95 pounds and has been labeled as overweight by the veterinarian. The Vet has asked the client to put the dog on a strict diet of Purina Dog Chow Complete and stick to the recommended daily feeding amount for an 80-pound dog, which is the recommended healthy body weight for Charlie. A 50-pound bag of Purina Dog Chow Complete costs \$22.98 per bag and contains approximately 200 cups of feed. Below is the Recommended Daily Feeding Guide from the label.



RECOMMENDED DAILY FEEDING GUIDE FOR ADULT DOGS*	
WEIGHT OF ADULT DOG 	CUPS PER DAY+ 
Up to 10 lbs	1/3 to 1
10 to 25	1 to 2
25 to 50	2 to 3 1/2
50 to 75	3 1/2 to 4 3/4
75 to 150	4 3/4 to 8

+1 cup = 8 oz. measuring cup, 1 can = 13.2 oz.

2. How many cups of Purina Dog Chow Complete should the client feed Charlie per day according to the label on the bag?

- A. 1/3 to 1 cup
- B. 1 to 2 cups
- C. 3 1/2 to 4 3/4 cups

D. $4\frac{3}{4}$ to 8 cups

3. If the client decides to feed the maximum recommended amount per day, how many days would a 50-pound bag of Purina Dog Chow Complete last?

A. 15 days

B. 45 days

C. 30 days

D. 25 days

4. If the client decides to feed the maximum recommended amount per day, how much will it cost the client to feed the dog for five months? (150 days)

A. \$68.94

B. \$91.92

C. \$114.90

D. \$137.88

5. To prepare for disinfection of hard non-porous surfaces against canine parvovirus, mix a solution of Clorox Regular-Bleach in 4 gallons of water at the rate of $\frac{3}{4}$ cup of bleach per 1 gallon of water. What is the volume of bleach added to the 4 gallons of water?

A. $2\frac{1}{4}$ cups

B. $2\frac{1}{2}$ cups

C. 3 cups

D. $3\frac{1}{2}$ cups

6. You have taken the body temperature of a dog that reads 38 degrees Celsius. The owner of the dog does not understand Celsius and asks you to convert it to Fahrenheit. What is the converted body temperature?

A. 100.4° F

B. 104° F

C. 102.5° F

D. 98.8° F

7. You purchase a box of 25 heartworm tests for your clinic for \$400.00 (wholesale). Your mark up to your patients is 150% per test. How much will your client pay for having two dogs tested?

A. \$16.00

B. \$32.00

C. \$40.00

D. \$80.00

8. A customer brings in a 52-pound hound that has received a bite from a wild animal. The doctor prescribes Cefazolin, a common antibiotic, which is administered at a dose rate of 18 mg/kg. What is the dose rate for the dog?

A. 424.8 mg

B. 648.4 mg

C. 936 mg

D. 2059.2 mg

9. A veterinarian prescribes Duramycin for a 300 lb. calf that is acting sluggish. The dosage on the label for cattle is 4.5 ml per 100 lbs. of body weight. What dose of Duramycin will be administered?

A. 13.5 ml

B. 15 ml

C. 17.5 ml

D. 19 ml

10. Megan brings his 4 kg iguana into the clinic for an infection. The veterinarian instructs the technician to administer an injection of Baytril. Baytril's dosage is 4mg/lb of body weight. How many milliliters of Baytril should the technician administer, if the concentration of the drug is 25 mg/ml? Round your answer to the nearest 10th.

A. 1.0 ml

B. ½ ml

C. 1.4 ml

D. 1.8 ml

11. As a veterinarian you are making a client home call that is 23 miles one way from your office to a beef cattle farm to render assistance to a calving cow. Your charge for the visit is \$75.00 for the first hour of the call and \$50.00 for each additional hour, plus \$0.57 per mile of travel. Additional charges for the call total \$73.00. You were on site assisting the cow for 5 hours. What are the total charges for the client home call?

A. \$99.22

B. \$174.22

C. \$301.22

D. \$374.22

12. How many milliliters (ml) are in 12 fluid ounces (oz) of liquid?

A. 12 mls

B. 180 mls

C. 360 mls

D. 720 mls

13. A veterinary assistant has a gross income of \$31,230.00. She was instructed that she will be receiving a 3% salary increase for her excellent work. What should she expect as her new annual salary?

A. \$30,560.00

B. \$31,542.00

C. \$31,845.00

D. \$32,167.00

Scenario for Questions 14-15

The veterinarian has prescribed VetIQ Hip&Joint chews for a client's Greyhound named Sparky that weighs 58 pounds. One bag of VetIQ Hip&Joint chews contains 45 soft chews and costs \$5.98.



DIRECTIONS FOR USE	
Can be given during or after meal time	
5 to 15 lb	1/2 chew every other day
16 to 30 lb	1/2 chew daily
31 to 60 lb	1 chew daily
61 to 100 lb	2 chews daily
Over 100 lb	2 1/2 chews daily

14. Using the scenario above, how many chews will the client need to feed to Sparky on a daily basis?

- A. 1/2 chew every other day
- B. 1/2 chew daily
- C. 3/4 chew daily
- D. 1 chew daily

15. Using the scenario above, how much will it cost the client to provide the appropriate medication to Sparky for a three month period (90 days)

- A. \$5.98
- B. \$11.96
- C. \$17.94
- D. \$23.92

16. A feedlot manager had several steers that had bovine interdigital phlegmon (foot root) and administered Nuflor (Florfenicol) intramuscularly on February 25 and March 1, 2026. The withdrawal time on the label says that animals intended for human consumption must not be slaughtered within 60 days of the last intramuscular treatment. What would be the first possible date that the manager could send the animals to processing?

A. March 15, 2026

B. April 30, 2026

C. May 1, 2026

D. May 15, 2026

17. A veterinary technician measures the length of a surgical incision on a dog. The incision measures 8 inches long. How many centimeters (cm) long is the incision?

A. 12 cm

B. 20 cm

C. 25 cm

D. 30 cm

Scenario for Questions 18–20

A producer owns a flock of 30 commercial Dorset ewes and expects approximately 48 lambs during the upcoming lambing season. The veterinarian recommends vaccinating all sheep with Case-Bac® vaccine to help prevent caseous lymphadenitis. The recommended dose is 3 mL per adult ewe, and two doses of 2 mL per lamb, administered at 4 weeks and 8 weeks of age.

18. Using the scenario above, if the producer wants to purchase all of the vaccine at one time, how many total milliliters (mL) of Case-Bac® vaccine should be prepared for the flock?

A. 282 mL

B. 204 mL

C. 216 mL

D. 240 mL

19. Using the scenario above, how many milliliters (mL) of Case-Bac® vaccine are required only for the adult ewes?

- A. 60 mL
- B. 75 mL
- C. 90 mL
- D. 120 mL

20. Using the scenario above, if the producer waits to purchase the vaccine and ends up with 55 lambs instead of 48, how many total milliliters (mL) of Case-Bac® vaccine would be needed for the entire flock?

- A. 210 mL
- B. 310 mL
- C. 350 mL
- D. 275 mL

Key-2026

1. B
2. D
3. D
4. D
5. C
6. A
7. D
8. A
9. A
10. C
11. D
12. C
13. D
14. D
15. B
16. C
17. B
18. A
19. C
20. B