

2024 Louisiana FFA State Veterinary Science CDE Math Practicum

Question 1

Convert the following weight to the unit listed.

206 g = _____ kg

- a. 206,000
- b. 0.2
- c. 2
- d. 21

Question 2

Convert the following measurements to the unit listed.

1,500 mL = _____ L

- a. 1.5
- b. 150
- c. 0.15
- d. 15

Question 3

Convert the following measurement to the unit listed.

2.4 cm = _____ mm

- a. 240
- b. 2,400
- c. 24
- d. 0.24

Question 4

A Bichon Frise puppy patient weighs 2.3 lbs.

How much is that in kg? Round to the nearest whole number.

- a. 230
- b. 23
- c. 1
- d. 5

Question 5

You are building an enclosure that measures 2.5 yds long, how many feet is that?

- a. 250
- b. 7.5
- c. 75
- d. 2.5

Question 6

The veterinarian orders 260 mg of phenobarbital, 130 mg/mL, to be administered IV to a patient having seizures. What volume in mL will you administer?

- a. 2
- b. 3
- c. 0.5
- d. 10

Question 7

The veterinarian's order is for amoxicillin 500 mg, give 2 tablets every 12 hours for 14 days. How many tablets will be dispensed?

- a. 14
- b. 24
- c. 48
- d. 56

Questions 8-10 will be based on the following information:

The veterinarian asks for enalapril 5 mg tablets for an 11 pound patient. They want the tablets administered at a dose of 0.5 mg/ kg two times daily for 21 days.

Question 8

What is the patient's dose according to its body weight in mg?

- a. 5.5
- b. 1
- c. 2.5
- d. 0.5

Question 9

How many tablets will you administer to the patient per dose, using the 5 mg tablets?

- a. 21
- b. 1
- c. 5
- d. 0.5

Question 10

How many tablets will you dispense to cover the whole treatment?

- a. 21
- b. 0.5
- c. 2
- d. 42

Question 11

The veterinarian has asked you to calculate the pulse/heart rate for an animal in the clinic. You monitor the animal for 15 seconds and measure 20 beats in the 15 second time period. What is the pulse/heart rate for the animal?

- a. 100 bpm
- b. 20 bpm
- c. 80 bpm
- d. 40 bpm

Question 12

A veterinary technician's gross median income per year is \$38,240. After working for a clinic for three years she asks for a 5% raise. Once awarded the raise what will be her new salary?

- a. \$38,240
- b. \$ 10, 912
- c. \$ 40,152
- d. \$ 57,360

Use the following information to answer questions 13-15

The Blue and Gold feedlot manager has a pot of cattle arriving on May 17, 2024. The cattle will be unloaded on May 17th and processed on May 18. The Blue and Gold feedlot uses DRAXXIN (tulathromycin injection) on arrival for control of BRD.

Warnings

RESIDUE WARNINGS: Cattle intended for human consumption must not be slaughtered within 18 days from the last treatment. This drug is not approved for use in female dairy cattle 20 months of age or older, including dry dairy cows. Use in these cattle may cause drug residues in milk and/or in calves born to these cows.

Dosage and Administration

Inject subcutaneously as a single dose in the neck at a dosage of 1.1 mL/100 lb body weight (BW). Do not inject more than 10 mL per injection site. Each bottle contains 250 mL.



Question 13

What would the proper dosage be for a steer weighing 321 kg?

- a. 3.5 mL
- b. 7.8 mL
- c. 3.4 mL
- d. 8.0 mL

Question 14

The full dose for the steer above can be given in the muscle in one location.

- a. True
- b. False

Question 15

If the average weight per calf is 600lbs and there are 70 calves in the lot arriving for processing on May 18th. How many bottles of Draxxin will the feedlot veterinarian provide?

- a. 1
- b. 2
- c. 3
- d. 4

Question 16

You have taken the temperature of a market goat that reads 33 degrees Celsius. The owner of the goat does not understand Celsius and asks you to convert it to Fahrenheit. What is the converted body temperature?

- a. 91.4
- b. 92
- c. 90
- d. 93.3

Use the following information for Questions 17-20

You currently work at Shadow Ranch, a top-of-the-line, equine-boarding facility that has the ability to accommodate unique needs of equine pets and owners. Below are all your facilities' boarding rates and service fees.

BOARDING RATES	
Full Service Boarding (Fed twice daily, Turned out for maximum 4 hours per day in good weather, bedding provided, stall mucked daily, owner responsible for providing feed, hay, and supplements)	\$150/week/horse 10% discount for booking 2-3 weeks 25% discount for 4 or more weeks
Basic Boarding (Fed once daily, turned out for maximum 4 hours per day in good weather, stall mucked daily, owner responsible for providing bedding, feed, hay, and supplements)	\$100/week/horse 10% discount for booking 2-3 weeks 25% discount for 4+ weeks
Pasture Boarding* (Monitors water and shelter, fed once daily outside, owner responsible for providing bedding, feed, hay, and supplements)	\$50/week/horse 10% discount for booking 2-3 weeks 25% discount for 4+ weeks

*In case of inclement weather or other issues, a stall may be rented for a nightly fee (\$40/night/horse)

*To maintain pasture quality all pasture boarding will be subject to additional \$25 pasture maintenance fee per invoice

ADDITIONAL SERVICES	
ADDITIONAL 1 TIME/DAY FEEDING <i>(This option is intended for when boarding package only includes one feeding per day and customer requires more)</i>	1 additional - \$30/animal 2+ additional - \$50/animal
BEDDING	\$50/week/animal
HAY	\$50/week/animal
FEED	\$50/week/animal
WALKING PACKAGE	\$25/week/animal
WATER EXERCISE	\$150/session/animal
EQUINE MASSAGE AND CHIROPRACTIC SERVICES	\$250/session/animal
BREEDING SERVICES	\$500 stud fee

Facility Rules and Guidelines

- **Security deposit is equal to 4 weeks boarding of one animal or total of all weeks if less than 4 for one animal.**
- First 4 weeks fee is due upon drop off.
- Rent payable by the 3rd of each month.
- Late fees: \$75/day starting on the 4th of each month until rent is paid. Maximum \$500/month late fee.

Question 17

A new client is seeking boarding for their horse during a 4-week back packing trip to Europe. Due to the client being international during the boarding period only Full Boarding will be an option. During this time the client has requested the walking package add-on. The client will pay the total at drop off including the security deposit which is refundable. What is the total upfront cost the customer will pay?

- a. \$ 550
- b. \$ 1,000
- c. \$ 1,300
- d. \$ 1,150

Question 18

At week 2 the owner from question 17 called and wanted to add one water exercise session. No other costs were added. What will the client owe/be refunded at pick up?

- a. Owe \$150
- b. Owe \$ 300
- c. Refunded \$150
- d. Refunded \$ 300

Question 19

A returning client has two donkeys to be pasture boarded for 3 weeks. During the 3 weeks severe weather required stalling under shelter for 5 days. What is the amount for the total invoice for the client?

- a. \$ 400
- b. \$ 295
- c. \$ 695
- d. \$ 270

Question 20

The client in question 19 calls on week two of boarding and needs one of the donkeys to have an additional feeding every day. How much is the new total for the client?

- a. \$450
- b. \$345
- c. \$320
- d. \$725

Answer Key

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