

Mathematics for Veterinary Technicians
 Test #2 – Form E
 100 Points Total

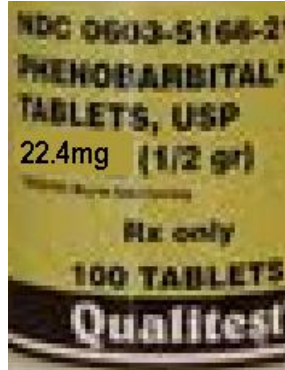
Name: _____ Date: _____

Questions cover work from chapter 1 thru 9. Show your work!!!!

Identify the correct concentration from the following medicine bottles and tablets. Write your answers to the right of the label or bottle.



1.



2.

3. Compute the answers:

a. 39.5×1.3

b. 1.8×58.5

4. Compute the answers to two decimal places:

a. $11.52 \div 0.68$

b. $3856.3 \div 0.16$

5. Convert the following to scientific notation:

a. 8,527,000

_____ . _____ x 10

b. 0.0056

_____ . _____ x 10

6. Convert the following to standard notation:

c. 2.75×10^6

d. -8.05×10^{-5}

7. Change to percent

a. $\frac{3}{16}$

b. $\frac{3}{4}$

c. 3.46

d. 1.89

8. What is

a. 8% of 25.6 L

b. 5.6% of 18 kg

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c. 42% of 150mg d. 0.015% of 6 lbs

9. Change to decimal

a. 98% b. 13%

c. 205% d. 0.075%

10. Change to a fraction (lowest terms please)

a. 115% b. -35%

c. 78% d. 0.025%

11. We ordered 168 pounds of lab chemicals.

a. What percentage did we use if we utilized 29.8 lbs?

b. What percentage is left over?

12. Convert the following to the proper unit of measurement

a. 16 g / 100 ml b. 8.7 g / 100 ml

13. Convert the following to the proper unit of measurement

a. 7.6g of dextrose in 100 ml solution b. 33.3 ml of sodium chloride in 100 ml solution

14. Convert the following Packed Cell Numbers to the proper unit of measurement

a. 47 dog₁ b. 41 dog₂

15. Convert the following solutions to percents

a. 13 ml of dextrose in 100 ml b. 2.5 ml of formalin in 100 ml

c. 7 ml of dextrose in 100 ml d. 65 ml of formalin in 100 ml

16. Reduce the ratio to fraction form

a. 3:18 b. 18:72

17. Solve the following. Be sure to show units where applicable

a. $\frac{65mg}{1\ cap} = \frac{715mg}{N\ cap}$

b. $\frac{720mg}{5ml} = \frac{25mg}{N\ ml}$

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18. Calculate the conversion and show the calculation in the box to the right of the answer

45 ml = tsp

2100 mg = g

32 kg = lb

4.18 L = ml

80 ml = tsp

16.9 ml = fl oz

11 g = mg

110 lb = kg

9 fl oz = ml

0.8 g = mg

0.025 L = ml

0.25 kg = g

73 mg = g

14 g = kg

50 ml = tbsp

11 tsp = ml

400 ml = fl oz

0.23 gr = mg

11 gr = mg

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45 ml =	<input type="text"/>	tbsp	<input type="text"/>
2 gal =	<input type="text"/>	cups	<input type="text"/>
7 qts =	<input type="text"/>	gal	<input type="text"/>
6 cups =	<input type="text"/>	pt	<input type="text"/>
35°C =	<input type="text"/>	°F	<input type="text"/>
200°F	<input type="text"/>	°C	<input type="text"/>
-10°C =	<input type="text"/>	°F	<input type="text"/>
-25°F =	<input type="text"/>	°C	<input type="text"/>

19. Our X-rays in 2012 were \$65. This year they will be 12% higher. What will be the new cost?

20. If 1 tablet contains 80 mg of drug, how many milligrams of drug does 7 tablets have?

21. There are three vet techs for every two veterinarians in the large zoo. What is the ratio of vet techs to veterinarians?

22. The veterinarians orders 225 mg of medication in every 2.5 ml of liquid. How much liquid is required to administer 380 mg of medication?

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23. If a bag of kitten food costs \$19.99 each and we buy 3 bags a week, how much money would we spend on kitten food in 16 weeks?
24. Frank works at an animal clinic and receives a 25% discount. What would Frank pay for the \$375 treatment?
25. A patient receives a total of 9g of medication. If the patient received the total over a 5-day period and was given 3 doses a day, what was the strength of each dose?
26. When performing an estimate platelet count, these cells are counted per high power field and the total from 10 fields are all added together. Next this is multiplied by 15000. You observe 10 fields and the fields have a total number of 61 platelets. What is the final count of platelets? Please provide your answer in scientific notation.