Mathematics for Veterinary Technicians
Test #1 – Form D
100 Points Total

Name: _____   Date: _____

Show your work!!!!!

Please change the following to common fractions. Please be sure to provide your final answer in the simplest from and circle it.

1. 10.568   2. 0.84

Real World Applications:

3. You are performing an inventory of hospital medications. You find 5 bottles of Cephalexin that are each – one fifth, one half, three-fourth, two thirds and one fourth full. You want to combine them. How many bottles will you have. Your final answer needs to be the simplest form.

4. We have 40 cages in the kennel. What is the current fraction for the following compared to our total cages in lowest terms:
   a. 22 dogs in cages in the kennel

   b. 18 cats in cages in the kennel

5. Simplify the following fractions

$$\frac{252}{262} \qquad\qquad \frac{342}{794} \qquad\qquad \frac{45}{1800}$$

$$\frac{81}{243} \qquad\qquad \frac{44}{352} \qquad\qquad \frac{32}{720}$$

6. Convert these improper fractions to mixed numbers

$$\frac{168}{22} \qquad\qquad \frac{92}{16} \qquad\qquad \frac{145}{9}$$

7. Perform the following mathematical problems and be sure to reduce them to the lowest terms.

a. $\dfrac{5}{6} \times \dfrac{8}{15}$

b. $\dfrac{1}{5} \times \dfrac{7}{9} \times \dfrac{9}{10}$

c. $4\dfrac{2}{9} \times 4\dfrac{3}{4}$

d. $7\dfrac{3}{8} + 8\dfrac{9}{10}$

e. $\dfrac{7}{12} \div \dfrac{5}{7}$

f. $10\dfrac{3}{14} \div 5\dfrac{2}{3}$

g. $\dfrac{2}{3} + \dfrac{4}{7} + \dfrac{5}{14}$

h. $10\dfrac{3}{8} + 6\dfrac{1}{5} + \dfrac{1}{4}$

i. $\dfrac{17}{25} - \dfrac{7}{10}$

j. $19\dfrac{8}{9} - 27\dfrac{3}{4}$

8. Describe as a fraction.

     a.   _____   eighty nine thousandths

     b.   _____   twenty three hundredths

     c.   _____   seven twelfths

9. Convert the following to scientific notation:

   a. 0.000023578   ____ . ____ ____ x 10

   b. 0.03568   ____ . ____ ____ x 10

   c. 6895.65   ____ . ____ ____ x 10

   d. 58897231   ____ . ____ ____ x 10

   e. 56899912000   ____ . ____ ____ x 10

10. Convert the following numbers to fractions. Your final answer needs to be the simplest form.

   a. 0.25   b. 0.2356

   c. 78%   d. 156%

11. Write the Roman Numerals as base 10 numbers

    a. XLIV   b. CMXXXVIII

    c. MMMCMIII   d. LXXXIX

12. Convert the numbers to Roman Numerals

    a. 233   b. 698

    c. 1953   d. 307

13. Convert the following numbers to fractions. Your final answer needs to be the simplest form.

a. $3\frac{1}{8}+3\frac{1}{7}\times\frac{5}{6}$

b. $1\frac{5}{8}\div2\frac{5}{6}\times\frac{2}{3}$

c. $\frac{7}{8}-\frac{3}{4}\times\frac{2}{3}$

d. $10\frac{9}{10}-3\frac{5}{8}+4\frac{2}{3}$

14. Dr. Williams needs to have Sally's medication refilled. The dose was 3 tablets orally three times a day for 15 days and then 2 ½ tablets orally once a day for 5 days. What is the total number of tablets that you need to send home for the correct dosage of medication? Please provide your answer in the simplest fraction form possible.

15. Compute the answers:

    a.   2.032 x 1.37   b. 2.25 x 9.75

16. Compute the answers to two decimal places:

    a.   12.75 ÷ 0.375   b. 12.875 ÷ 0.0625