Name: _____ Date: _____ Period: ____

College Math Chapter 5 Review

Write each ratio as a fraction in lowest terms. Use whole numbers.

1. $2.50 *to* $1.25
2. 5 *hours to* 100 *minutes*
3. Jake sold $350 worth of his figurines. Ramona sold $500 worth of her pottery. What is the ratio of her sales to his?
4. This fall, 6000 students are taking math courses and 7200 are taking English courses. Find the ratio of math students to English students?

Write each rate as a fraction in lowest terms. Use whole numbers.

5. 96 *children in* 40 *families*
6. In his keyboarding class, Patrick can type 4 pages in 20 minutes. Give his rate in a) pages per minute AND b) minutes per page

Find the best buy

7. Minced onion
    a. 13 ounces for $2.29
    b. 8 ounces for $1.45
    c. 3 ounces for $0.95
8. Dog food, you have a coupon for $1 off 25 pounds or more
    a. 50 pounds for $19.95
    b. 25 pounds for $10.40
    c. 8 pounds for $3.40

Use either method to determine whether each proportion is true of false. Show work.

9. $\dfrac{64}{36} = \dfrac{96}{54}$

10. $\dfrac{1.5}{2.4} = \dfrac{2}{3.2}$

11. $\dfrac{3\frac{1}{2}}{2\frac{1}{3}} = \dfrac{6}{4}$

Find the unknown number. Round answers to nearest hundredth if necessary.

12. $\dfrac{4}{42} = \dfrac{150}{x}$

13. $\dfrac{x}{3.6} = \dfrac{9.8}{0.7}$

14. $\dfrac{0.2}{2} = \dfrac{1\frac{1}{6}}{x}$

Set up and solve each application problem using a proportion.

15. The ratio of cats to dogs at a local animal shelter is 3 to 5. If there are 45 dogs, how many cats are there?

16. If 3.5 pounds of ground beef cost $9.77, what will 5.6 pounds cost? Round to the nearest cent.

17. The scale of Marc's model railroad is 1 in to 16 ft. One of the scale model boxcars is 4.25 in long. What is the length of a real boxcar?

18. Nearly 7 out of 8 fans buy something to drink at a football game. How many of the 28,500 fans at Sunday's game is expected to buy a drink? Round to the nearest hundred fans.

19. Charles made 251 points during 169 minutes of playing time last year. If he plays 8 minutes in tonight's game and 6 minutes in last night's game, how many points would you expect him to make? Round to the nearest whole number.

20. A vitamin supplement for cats is to be given at the rate of 1000 milligrams for a 5 pound cat.

   a. How much should be given to a 7 pound cat?

   b. How much should be given to an 8 **OUNCE** kitten?