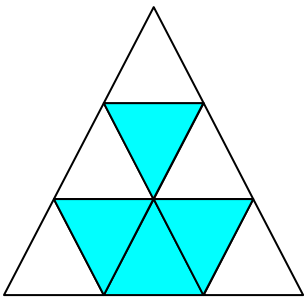
Review Problems for Chapter 5 Name_____
Seat _____ Section _____

1. Write a fraction that represents the shaded portion.



2. Find the simplest form for the fraction $\frac{84^2}{91^2}$.

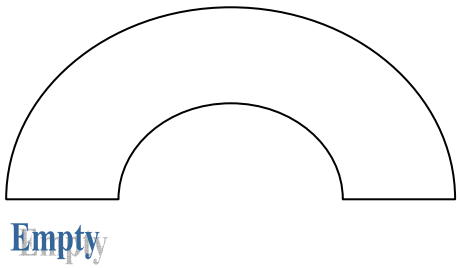
3. Mr. Gonzales and Mrs. Price gave the same test to their fifth-grade classes. In Mr. Gonzales' class, 20 out of 25 students had an A or a B. In Mrs. Price's class, 24 out of 30 students had an A or a B. Which class did better? Show two different solutions to support your answer.

4. Simplify: $\frac{2^{16}+2^{15}}{2^{14}-2^{13}}$

5. Find the simplest form for the fraction: $\frac{a}{3a+ab}$.

6. If a fraction is equal to 2/5, and the sum of the numerator and the denominator is 231, what is the fraction?

7. Dr. Tracy filled her 24 gallon gas tank. She then made a farm call and used 3 gallons of gasoline. Draw an arrow in the following figure to show what her gas gauge looked like after the trip.



8. Arrange the following fractions in increasing order : $\frac{-2}{3}, \frac{1}{4}, \frac{-3}{4}, \frac{2}{5}, \frac{-2}{5}$

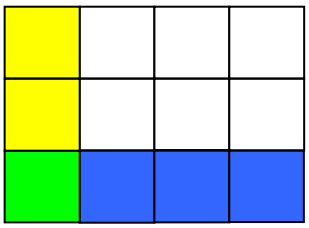
9. Find three rational numbers between $\frac{11}{12}$ and $\frac{14}{15}$.

10. Find the approximate sum of $\frac{7}{15} + \frac{24}{11} + \frac{24}{7} - \frac{21}{5}$. Show how you arrived at your answer.

11. Which of the following properties hold for the operation of subtraction?
    a. associative property
    b. closure over the set of rational numbers
    c. inverse
    d. identity
    e. commutative property

12. a. What month of the year has the smallest fraction of days of the year?
    b. What fraction of days of the year occur before Dec 25^{th} ?
    c. How many days are actually in a year? Express your answer as a mixed number.

13. Write the multiplication problem indicated in the rectangle below and the solution.



14. Give a range of values for the solution to the following problem to help check your solution:

$$4\frac{3}{5}\times 7\frac{2}{3}$$

15. Describe how to use the distributive property to find the answer below:

$$6\frac{3}{4}\times 8\frac{2}{3}$$

16. Simplify: $\left(\frac{4}{5}\right)^7 \div \left(\frac{5}{4}\right)^5$

17. Which is greater: 32^5 or 4^{10}? Explain your answer.

18. David read 40 pages of a book in 50 minutes. How many pages should he be able to read in an hour and a half at the same rate?

19. A rectangular yard has a width-to-length ratio of 4:9. If the length of the fence around the yard is 910 feet, what are the dimensions of the yard?

20. The recipe for Pumpkin Pie Dip (great with sliced apples or ginger wafers) is given below. However when you start to make it, you have only 1/3 cup of sour cream. How do you adjust the recipe to make it taste the same?

Pumpkin Pie Dip	*Pumpkin Pie Dip*
8 oz cream cheese	*___ oz cream cheese*
2 cups powdered sugar	*___ cups powdered sugar*
1 cup pumpkin	*___ cup pumpkin*
1/2 cup sour cream	*1/3 cup sour cream*
1 tsp cinnamon	*___ tsp cinnamon*
1 tsp pumpkin pie spice	*___ tsp pumpkin pie spice*
1/2 tsp ginger	*___ tsp ginger*
1/2 tsp vanilla.	*___ tsp vanilla.*

21. If a geometric sequence has 4/9 as its seventh term, and the ratio of the sequence is 1/2, what is the third term?

22. Jose found out that after working for nine months, he had earned 15 days vacation. How many days of vacation does he get each year?

23. Explain which is greater: $\frac{-11}{9}$ or $\frac{-5}{4}$.

24. The ratio of boys to girls in Mr. Good's class is 3 to 5. The ratio of girls to boys in Mrs. Garcia's class is 2 to 1, and you know that there are 15 girls in Mr. Good's class. How many boys are in Mrs. Garcia's class, if they have the same class size?

25. When Jim got home he ate 1/3 of the half of pizza that was left from the previous night. If the whole pizza had 2400 calories, how many calories did Jim consume?