

Name: _____

GCF and LCM

- 1) To celebrate a grand opening, the owner of an art supplies store is making free gift bags for customers. The owner has 225 pastel crayons, 75 paintbrushes, and 120 tubes of oil paint. Each gift bag must be identical. What is the greatest number of gift bags the owner can make?
- Write the prime factorization of each number.
 - What are the common prime factors of the numbers? What is the GCF of the numbers?
 - What does the GCF represent in this situation?
- 2) A summer music camp has 88 participants. The camp has 32 vocalists, 16 drummers, 24 guitarists, and 16 bassists. What is the greatest number of identical bands that can be formed using all the participants? How many vocalists will be in each band?
- 3) The science club is selling flowers for a fundraiser. The club wants to make bouquets from 4 types of flowers. The circle graph shows how many flowers of each type the club has. What is the greatest number of identical bouquets that can be made? What will each bouquet contain?
- How are the terms least common multiple and least common denominator related?
 - Describe how you would use the LCD to compare $\frac{4}{7}$ and $\frac{7}{12}$.
- 4) In the first pattern shown below, the green star repeats every 6 figures. In the second pattern, the green star repeats every 8 figures. How many figures after the first figure will both patterns have a green star?

