

Name: ..... Class: .....

### GCF and LCM word problems

- ❖ During an eating challenge of potato chips, Player A ate 4 chips per bite while Player B took 17 chips per mouthful. Curiously, at the end of the competition, the number of chips each player had eaten was the same.  
What could be the total number of potato chips that each player, A and B had eaten?
- ❖ Flora is making bouquet of flowers. She has 24 white roses, 24 red roses, 12 tulips, and 36 lilies. If she want to make all the bouquet identical without having any flowers leftover, what is the greatest number of bouquet of flowers she can make?
- ❖ Luna, Ella, and Mila are given a task to stack the same volume of books. Mila's books are 8cm high; Luna's books are 4cm high, while Ella's books are 6cm high. How tall in meters will their stacks be when they are at the same height for the third time?
- ❖ Jude goes to the gym every 5 days and goes shopping for his work supplies every 12 days. If he did both events today, how many days from now will he go to the gym and shopping for his work supplies on the same day again?
- ❖ Boris picked some apples from his father's orchard. He is selecting red, green, and yellow apples that he picked and putting it into boxes. He picked 49 red apples, 35 green apples, and 42 yellow apples.
- What is the greatest number of identical boxes Boris can put all the apples in with the same combination of each type?
  - How many of each type of apple will there be per box?
- ❖ A company is making Scroggin out of 15 bags of candy, 20 bags of dried fruit, 35 bags of nuts, and 10 bags of granola. They want each batch of Scroggin to be identical that is, containing the same combination of bags of candy, dried fruit, nuts, and granola.
- Find the greatest number of batches of Scroggin the company can make.
  - How many bags of candy, dried fruit, nuts, and granola will each batch of Scroggin contain?

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1. Let's look at the least possible number of potato chips each player ate. We will find the LCM of 4 and 17.

So multiples of 4 are : 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 68, 72 ...

multiples of 17 are : 17, 34, 51, 68, 85 ...

➡ So, each player ate 68 potatoe chips.

❖ So, she can make 12 identical bouquets of flower.

❖ So, their stacks will be at the same height of 1.2 meters for the third time.

❖ So, he will go to the gym and shopping for his work supplies at the same day again 60 days from now.

❖ a- So, Boris can put all the apples into 7 identical boxes.

b- So, there will be 7 red apples, 5 green apples, and 6 yellow apples per box.

❖ a- So, the company can make 5 identical batches of Scroggin.

b- So, each batch of Scroggin will contain 5 bags of candy, 3 bags of dried fruit, 7 bags of nuts, and 2 bags of granola.