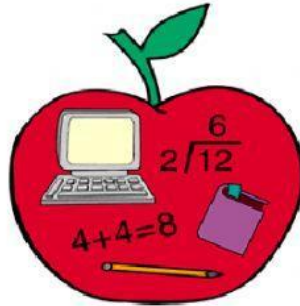# GCF and LCM Word Problems

Solve each word problem by finding GCF or LCM.

1. Sam and Carlos are bowling with plastic pins in Sam's living room. Remarkably, Sam knocks down 8 pins on every bowl, and Carlos knocks down 9 pins on every bowl. At the end of the day, Sam and Carlos have knocked down the same total number of pins. **What is the least number of total pins that Sam and Carlos could have each knocked down?**

   A. 84 pins
   B. 63 pins
   C. 72 pins
   D. 94 pins

2. Kiara baked 36 oatmeal cookies and 48 chocolate chip cookies to package in plastic containers for her friends at school. She wants to divide the cookies into identical containers so that each container has the **same number of each kind of cookie**. If she wants each container to have the **greatest number of cookies possible**, how many plastic containers does she need?

   Kiara needs _____ **plastic containers** for her cookies.

3. Boxes that are 12 inches tall are being stacked next to boxes that are 18 inches tall. What is the **shortest height** at which the two stacks will be the **same height**?

   The two stacks will be the same height at _____ **inches**.

4. Beginning at 8:30 A.M., tours of the National Capitol and the White House begin at a tour agency. Tours for the National Capitol leave every 15 minutes. Tours for the White House leave every 20 minutes. How often do the tours **leave at the same time**?

   A. Every 15 minutes
   B. Every 30 minutes
   C. Every 45 minutes
   D. Every 60 minutes

5. The table below shows the number of students in the school choir.

School Choir

Students	Number
Girls	48
Boys	54

The choir teacher plans to arrange the students in equal rows. Only girls or boys will be in each row. What is the **greatest number of students** that could be in each row?

   A. 6   B. 12   C. 8   D. 4

6. At a display booth at an amusement park, every visitor gets a gift bag. Some of the bags have items in them as shown in the table below.

Items in the Gift Bags

Items	Bags
Hat	Every 6th visitor
T-shirt	Every 8th visitor
Backpack	Every 12th visitor

How often will a bag **contain all three items**?

    A. Every 14 bags

    B. Every 18 bags

    C. Every 24 bags

    D. Every 140 bags

7. Each time Miranda goes to the store she plans to spend $7, and each time Savannah goes to the store she plans to spend $9.

If A few weeks from now, Miranda and Savannah are surprised to find out that they have spent the exact same total amount of money at the store, **what is the least amount of money that both girls would have spent at the store?**

    A. $45
    B. $56
    C. $72
    D. $63

8. Shaquira is baking cookies to put in packages for a fundraiser. Shaquira has made 54 chocolate chip cookies and 63 sugar cookies.

Shaquira wants to create identical packages of cookies to sell, and she must use all of the cookies.

What is the greatest number of identical packages that Shaquira can make?

_____ packages