

LCM and HCF

1. Kamal has 6 cans of regular soda and 15 cans of diet soda. He wants to create some identical refreshment tables that will operate during the American football game. He also doesn't want to have any sodas left over. What is the greatest number of refreshment tables that Kamal can stock?
2. Sapphire and Abe are shelving books at a public library. Sapphire shelves 5 books at a time, whereas Abe shelves 6 at a time. If they end up shelving the same number of books, what is the smallest number of books each could have shelved
3. To encourage public transportation, Russom wants to give some friends envelopes with bus tickets and subway tickets in them. If he has 18 bus tickets and 12 subway tickets to split equally among the envelopes, and wants no tickets left over, what is the greatest number of envelopes Russom can make?
4. Veronica is making emergency-preparedness kits to share with friends. She has 20 bottles of water and 12 cans of food, which she would like to distribute equally among the kits, with nothing left over. What is the greatest number of kits Veronica can make?
5. Colton has 16 blue marbles and 8 white ones. If he wants to place them in identical groups without any marbles left over, what is the greatest number of groups Colton can make?
6. 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?
7. There are 48 girls and 64 boys in the school choir. 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?