

Greatest Common Factor/Least Common Multiple Word Problems

1. Sara has 16 red flowers and 24 yellow flowers. She wants to make bouquets with the same number of each color flower in each bouquet. What is the greatest number of bouquets she can make?
2. Two neon signs are turned on at the same time. Both signs blink as they are turned on. One sign blinks every 9 seconds. The other sign blinks every 15 seconds. In how many seconds will they blink together again?
3. Lisa is making activity baskets to donate to charity. She has 12 coloring books, 28 markers, and 36 crayons. What is the greatest number of baskets she can make if each type of toy is equally distributed among the baskets? How many of each supply will go into the baskets?
4. The school cafeteria serves tacos every sixth day and cheeseburgers every eight day. If tacos and cheeseburgers are both on today's menu, how many days will it be before they are both on the menu again?

5. Peter has 18 oranges, 27 pears and 12 bananas. He wants to make fruit baskets with the same number of each fruit in each basket. What is the greatest number of fruit baskets he can make? How many of each type of fruit will be in the baskets?

6. The Math Counts Club had a party at school. There were 20 cookies and 40 slices of pizza to be shared equally. Each student had the same number of whole cookies and the same number of slices of pizza with nothing left over. How many students could have been at the party? (There is more than one answer. List as many as you can.)

7. Two clocks are turned on at the same time. One clock chimes every 15 minutes. The other clock chimes every 25 minutes. In how many minutes will they chime together?

8. Jenny goes to dance class every 6 days, karate class every 12 days, and to the library every 18 days. On December 1st she went to both classes and the library. On what date will she do both classes and go to the library?

9. At Kentucky Fried Chicken, the kitchen staff baked 96 chicken legs, 144 thighs, and 224 wings. The staff had to prepare platters for a catered lunch at an office. Each platter will have the same number of legs, thighs, and wings. How many platters can the staff make if they want the greatest number of chicken pieces on each platter?
10. Radio station Z-100 was giving away a \$100 bill to every 100th caller during a contest and gave Jingle Ball tickets to every 40th caller. How many callers must call before someone wins both a \$100 bill and a Jingle Ball ticket?
11. Jeremy has two pieces of wood: one is 90 inches and the other is 72 inches. He wants to cut both pieces of wood into smaller pieces so that all these pieces are the same length. If he wants the pieces to be as long as possible and doesn't want to have any lumber left over, how long should each piece be? How many total pieces of lumber will he have?

12. Melanie has pieces of train track that are 8 inches long that she is connecting together to form a track that her train can travel on. Martin is also trying to construct a track for his train but is using track pieces that are 20 inches long. How long will the shortest track be if the track that Melanie builds ends up being the same length as Martin's track?
13. At the movie theatre, they give out a free drink to every 75th customer and a free bag of popcorn to every 30th customer. On Monday 3,000 customers came to the theatre. How many people received both free items?
14. Henry and Margo both began traveling around a circular track. Henry is riding his bike, and Margo is walking. It takes Henry 7 minutes to make it all the way around, and Margo takes 12 minutes. How much time will pass until they meet at the starting line?