

Greatest Common Factor (GCF) and Least Common Multiple (LCM) word problems

Grade 5 Math Word Problems Worksheet

1. There are 28 girls and 42 boys from 6 sections registered to participate in a science quiz bee. The quiz master wants as many teams as possible, with the same number of boys and girls on each team. How many teams will there be? How many boys and girls are on each team?

2. Carina has 24 apples, 36 bundles of bananas and 12 lemons. She wants to put all of the fruit into plastic containers, each with the same number of pieces of fruit in it. What is the greatest number of pieces of fruit she can put in each plastic container?

3. Rudy and Lynn are working delivering newspapers and magazines from a publishing company for 7 months. Rudy delivers newspapers every 3 days in a village. Lynn also delivers magazines every 7 days in the same village. If the two students deliver today, when is the next time they will deliver on the same day?



4. Anna Marie needs to pack 15 pencils, 12 boxes of crayons and 9 pens into bundles. She must pack one item in each bundle and each bundle must have the same number of items. What is the greatest number of the same items she must pack in a bundle?
5. The 3 bells ring at the factory at intervals of 3, 6 and 10 minutes simultaneously starting at 8:00 in the morning. At what time will the three bells ring together at the same time?

Answers

- Factors of 28: 1, 2, 4, 7, 14, 28
42: 1, 2, 3, 6, 7, 14, 21, 42
There would be 14 teams.

Girls: $28 \div 14 = 2$
Boys: $42 \div 14 = 3$
There would be 2 girls and 3 boys on each team.
- Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24
36: 1, 2, 3, 4, 6, 9, 12, 18, 36
12: 1, 2, 3, 4, 6, 12
There would be 12 pieces of fruit in each plastic container.
- Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
7: 7, 14, 21, 28, 35, 42, 49
They will deliver on the same day again 21 days later.
- Factors of 15: 1, 3, 5
12: 1, 2, 3, 4, 6, 12
9: 1, 3, 9
She must pack 3 of the same items per bundle.
- Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
6: 6, 12, 18, 24, 30, 36, 42
10: 10, 20, 30, 40, 50
The three bells will ring together at 8:30 am.