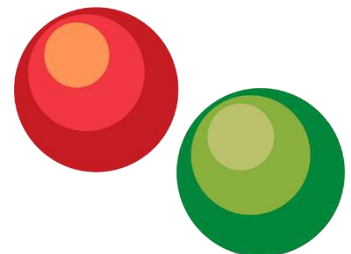


Greatest Common Factor (GCF) and Least Common Multiple (LCM) word problems

Grade 5 Math Word Problems Worksheet

1. The 3 colors in the Christmas lights blink at different times. The yellow light blinks every 3 seconds, the green light blinks every 4 seconds and the red blinks every 2 seconds. If the three lights blink now, when is the next time the three lights will blink at the same time?
2. Ed bought 24 hamburgers, 48 chocolate bars and 36 cans of soda to celebrate his birthday with his classmates. In 5 hours, he prepared the food so that each of his classmates would receive the same amount of food. How many classmates did he prepare food for? How many hamburgers, chocolate bars and cans of soda will each classmate receive?
3. Junie has 3 different colors of marbles. There are 35 red marbles, 63 white marbles and 56 green marbles. She placed them in plastic containers containing equal numbers of each color. Without any left over, how many marbles will she put in each plastic container?



4. The Mathematics Club adviser wants to group the members for their activity. She can group the club members into 6, 8 or 12 members without any members left behind. At least how many club members are there in the Mathematics Club?
5. At a birthday party, Alexander has 12 one-dollar bills, 18 quarters and 24 pennies which will be given to the winners of 3 games. The prizes will be given such that each winner will receive the same amount of money. How many winners can receive a prize? How much money will each winner receive?

Answers

1. Multiples of 3: 3, 6, 9, 12, 15, 18

4: 4, 8, 12, 16, 20

2: 2, 4, 6, 8, 10, 12, 14, 16

The three lights will blink together after 12 seconds.

2. Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24

36: 1, 2, 3, 4, 6, 9, 12, 18, 36

48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

He prepared the food for 12 classmates.

Hamburgers: $24 \div 12 = 2$

Chocolate bars: $48 \div 12 = 4$

Soda: $36 \div 12 = 3$

Each of his classmates will receive 2 hamburgers, 4 chocolate bars and 3 cans of soda.

3. Factors of 35: 1, 5, 7, 35

63: 1, 3, 7, 9, 12, 63

56: 1, 2, 4, 7, 8, 14

She will put 7 marbles in each plastic container.

4. Multiples of 6: 6, 12, 28, 24, 30

8: 8, 16, 24, 32

12: 12, 24, 36, 48

There are at least 24 members in the Mathematics Club.

5. Factors of 12: 1, 2, 3, 4, 6, 12

18: 1, 2, 3, 6, 9, 19

24: 1, 2, 3, 4, 6, 8, 12, 24

There would be 6 winners.

Dollar bill: $12 \div 6 = 2$

Quarter coin: $18 \div 6 = 3$

Penny: $24 \div 6 = 4$

Each winner will receive 2 one-dollar bills, 3 quarters and 4 pennies for a total amount of \$2.79 each.