



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

Grade 5 Math Word Problems Worksheet

1. Eva and Agnes are packing candy bars. Eva packs 9 chocolate bars per box while Agnes packs 8 fruit bars per box. If they want to pack an equal number of bars, how many bars should each of them pack? How many boxes does Eva need to pack?
2. Ronald found 3 iron rods in his garage measuring 64 inches, 56 inches and 40 inches long. He wants to cut those iron rods obtaining the longest possible equal-length pieces without remainder in reconstructing his house gate. How long would each piece be?
3. It's Mothers' Day. Allyn needs to arrange 48 roses, 54 carnations, and 30 sunflowers in bouquets. She can include only one type of flower per bouquet, and she must use the same number of flowers in each bouquet. What is the greatest number of flowers that can be packed in each bouquet? How many bouquets can she make?





4. The local government is distributing 49 lemon seedlings, 63 tomato seedlings and 28 jackfruit seedlings equally among some aspiring fruit farmers. What is the greatest number of farmers who will be able to receive the same number of fruit seedlings? How many lemon seedlings will each farmer get?
5. Evelyn and Ofelia love gardening. Evelyn waters her plants every 3 days. Her neighbor Ofelia waters her plants every 5 days. If they both water their plants on July 1, what is the next date they will water their plants together?



Answers

1. Multiples of 9: 9, 18, 2, 36, 45, 54, 63, 72, 81, 90
8: 8, 16, 24, 32, 40, 48, 56, 64, 72, 80
Each of them should pack 72 bars.
 $72 \div 9 = 8$
In order to have same number of bars as Agnes, Eva needs to pack 8 boxes.
2. Factors of 64: 1, 2, 4, 8, 16, 32, 64
56: 1, 2, 4, 7, 8, 14, 28, 56
40: 1, 2, 4, 5, 8, 10, 20, 40
Each piece of iron rod would be 8 inches long.
3. Factors of 48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
54: 1, 2, 3, 6, 9, 18, 27, 54
30: 1, 2, 3, 5, 6, 10, 15, 30
She can put 6 flowers in each bouquet.
 $48 + 54 + 30 = 132$
 $132 \div 6 = 22$
She can make 22 bouquets of flowers.
4. Factors of 49: 1, 7, 49
63: 1, 3, 7, 9, 21, 63
28: 1, 2, 4, 7, 14, 28
There will be 7 farmers who receive the same number of each type of fruit seedling.
 $49 \div 7 = 7$
Each farmer will receive 7 lemon seedlings.
5. Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30
5: 5, 10, 15, 20, 25, 30
They will water their plants together on July 16, the 15th day after July 1.