

Name: Class:

GCF and LCM word problems

» A tennis club has 60 boys and 12 girls as members. They want to break them into mixed teams of similar combination of each gender. The club manager also need everyone to participate. Find the highest number of team that the club could have after team partition.



» During the pumpkin harvest, Maude carried six pumpkins per turn in her basket. On the other hand, Laura came and left with 18 pumpkins each turn. To everyone's surprise, they harvested the same amount of pumpkins. What is the least total number of pumpkin baskets that Maude had to carry to reach that result?



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❖ A tennis club has 60 boys and 12 girls as members. They want to break them into mixed teams of similar combination of each gender. The club manager also need everyone to participate. Find the highest number of team that the club could have after team partition.

1. First, let's find the highest number of teams by looking at the GCF of 60 and 12. The number that can divide 60 and 12 without a remainder.



$$\text{Prime factors of } 60 = 2 \times 2 \times 2 \times 3 \times 5$$

$$\text{Prime factors of } 12 = 2 \times 2 \times 3$$

$$\text{GCF of } 60 \text{ and } 12 = 2 \times 2 \times 3 = 12$$

➡ Therefore, there will be 12 teams.

❖ During the pumpkin harvest, Maude carried six pumpkins per turn in her basket. On the other hand, Laura came and left with 18 pumpkins each turn. To everyone's surprise, they harvested the same amount of pumpkins. What is the least total number of pumpkin baskets that Maude had to carry to reach that result?

1. First, let's find the LCM of 6 and 18 to get the least total number of pumpkin baskets.



So multiples of 6 are : 6, 12, 18, 24 ...

multiples of 18 are : 18, 36 ...

$$\text{LCM of } 6 \text{ and } 18 = 18$$

➡ Therefore, Maude had to carry at least 18 number of pumpkin baskets.