Solving for GCF and LCM of 3 (or more) numbers:

When asked to find the GCF of three (or more) numbers, each factor has to be divided out from each of the numbers:

EX #1: You own a florist shop. On delivery day you get an order of 28 roses, 84 daisies, and 56 daffodils. You want to make as many bouquets as possible, but each needs an equal number of each kind of flower in it. What is the greatest number of bouquets that you can make?

Are you solving for a factor or multiple?   WHY?

Use your ladder to solve:

Ask: Does my answer make sense?

EX #2: On the Blue Fish swim team, there are 24 6th graders, 30 7th graders, and 36 8th graders. The coach, Ms. Dolphin, wants to make relay teams with an equal number of 6th, 7th, and 8th graders on each team. How many relay teams can she make?

Are you solving for a factor or multiple?   WHY?

Use your ladder to solve:

Ask: Does my answer make sense?

But when you are solving for LCM of three (or more) numbers, keep factoring until the GCF of any two or three of the numbers is 1.

EX #3: A new bakery is opening in Medfield and they are promoting their new shop with the following special: Every 4th customer gets a free cup of coffee, every 10th customer gets a free cookie, and every 12th customer gets a free $5 gift card. Which customer will be the first to get all three special prizes?

Are you solving for a factor or multiple?   WHY?

Use your ladder to solve:

Ask: Does my answer make sense?

EX #1: Sarah wears her blue sweater every 6th day, her high top sneakers every 9th day and her green bracelet every 15th day. On what day will Sarah wear all three?

Are you solving for a factor or multiple?   WHY?

Use your ladder to solve:

Ask: Does my answer make sense?