TIP #2 – Draw a picture! Sometimes visualizing the problem will help it to make more sense!

Example 1:

Johnny is making goodie bags that include a lollipop and bubbles. If the lollipops come 4 to a pack, and the bubbles come 6 to a pack, what is the smallest number of bags that he can make and not have anything left over? How many packs of lollipops and bubbles should he buy?

Draw 4 lollipops and 6 bubbles until there are no items "left over", until all of the lollipops have a matching bottle of bubbles.

The WORDS is "smallest", so you're finding LCM.

The smallest number of bags w/o leftovers = 12. He needs 3 packs of lollipops and 2 packs of bubbles.

Example 2:

Shannon is making identical balloon arrangements for a party. She has 24 white balloons and 16 blue balloons. She wants each arrangement to have the same number of each color. What is the greatest number of arrangements that she can make if every balloon is used?

WWWBB WWWBB WWWBB WWWBB
WWWBB WWWBB WWWBB WWWBB

Draw the balloons in the largest possible number of equal groups

The WORDS is "greatest", so you're finding GCF.

She can make 8 balloon arrangements.

You Try:

1) There are 40 girls and 32 boys who want to participate in 6th grade intramurals. **If each team must have the same number of girls and the same number of boys, what is the greatest number of teams that can participate in intramurals? How many girls and boys will be on each team?**

# of teams _____

# of girls _____

# of boys _____

2) Fred is making some hot dogs for his company picnic. Buns come 12 to a pack and hot dogs come 8 to a pack. **What is the fewest number of hot dogs he can make and not have any leftover buns or hot dogs? How many packs of buns and packs of hot dogs should he buy?**

# of hot dogs with buns that can be made _____

# of packs of buns _____

# of packs of hot dogs _____

3) At the Regal Cinemas grand opening, every 8th customer will receive a free drink and every 10th person will receive a free movie rental. **What number customer will be the first to receive both gifts?**

# of customer to receive both gifts _____

4) Stephen is making a garden of 36 tomato plants and 45 corn plants. He wants to spread the plants out on as many rows as possible, so that each row has the same number of tomato plants and the same number of corn plants. **What is the maximum number of rows that Stephen can plant? How many tomato plants will be on each row? How many corn plants will be on each row?**

# of plants per row _____

# of tomato plants per row _____

# of corn plants per row _____

5) Dayvon had a collection of baseball cards that he wants to divide evenly into his albums. He has 36 Braves cards and 48 Cubs cards. **What is the greatest number of albums he can use? How many Braves cards and Cubs cards will be in each album?**

# of albums _____

# of Braves cards per album _____

# of Cubs cards per album _____

6) Two pigs entered a race around a track. Piggly takes 6 minutes to run one lap. Wiggly takes 5 minutes to run one lap. **If both pigs begin the race at the same time, what is the shortest number of minutes it will take for them to be back at the starting line? How many laps will each pig have made at that time?**

Time for both pigs to be at starting line _____

# of laps for Piggly _____

# of laps for Wiggly _____

7) Enzo and Beatriz are playing games at their local arcade. Incredibly, Enzo wins 5 tickets from every game, and Beatriz wins 11 tickets from every game. When they stopped playing games, Enzo and Beatriz had won the same number of total tickets. **How many tickets did each student win? How many games did Enzo and Beatriz each play?**

# of tickets each student each won _____

games that Enzo played _____

games that Beatriz played _____

8) Tim has 39 pairs of headphones and 13 music players. Tim wants to sell all of the headphones and music players in identical packages. **What is the greatest number of packages Tim can make? How many headphones and music players will be in each package?**

packages Tim can make _____

headphones per package _____

music players per package _____

9) Audra has two rolls of streamers to use in decorating the school gym for a pep rally. The red streamers are 64 yards long and the blue streamers are 72 yards long. **What is the maximum length each streamer can be so that they are all of equal length? How many red streamers would she have? How many blue streamers would she have?**

Length of each streamer _____

# of red streamers _____

# of blue streamers _____