Uncle Joe asked Mo and Lana to order 54 new wheels for the 21 new skateboards and bicycles in his repair shop. How many skateboards and how many bicycles are in Uncle Joe's repair shop?

1. List the important information you need to solve the problem.

2. Try to find a combination of 21 bicycles and skateboards that will have 54 wheels. Show all your strategies/ideas, even if they didn't work out.

3. Are there any equations you could write that would help solve this problem? Be sure to write what your variables stand for.

4. Is there anything unrealistic about this problem?

5. Imagine the problem is slightly different. You now know there are 54 wheels in the repair shop, but you don't know the number of bikes and skateboards. How will this change the solution?
6. Find a combination of bikes and skateboards that has 54 wheels. Is your combination the only solution?
7. List all possible solutions that have 54 wheels.
8. Is there an equation that would help understand this problem?
9. Is there a visual way to represent all the solutions to the problem?
10. What mistakes did you make when trying to solve these problems?
11. What lessons can you take away from solving these problems?