

Name _____

Your school has a row of 150 single lockers in a hallway. A math teacher wants to try out an idea. She gets 150 students to help her.

The first student walks down the hall and opens every single locker. The next student comes by and closes every second locker. The third student goes to every third locker—if it's open, he closes it. If it's closed, he opens it. The fourth student goes to every fourth locker. If it's already open, she closes it. If it's closed she opens it. This goes on with all 150 students.

When all 150 students have finished, which lockers are open?

Use the space below to figure out the problem.

Explain how you got your answer.