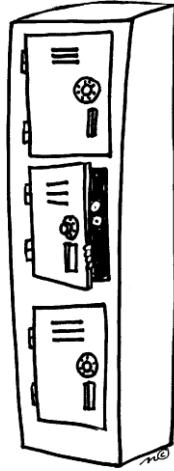


Problem #8 - Middle School Locker



A School has a hall with 100 lockers, all of which are closed. One hundred students start down the hall. The first student opens every locker. The second student closes all the lockers that are multiples of 2. The third student changes (closes an open locker or opens a closed one) all multiples of 3. The fourth student changes all multiples of 4. And so on.

After all students have finished with the lockers, how many lockers are closed and which ones?

Due date: Friday, Nov. 18th, 2011

Submit to Mr. Streit in person or email your solution. Please place the POW number and your name in the Subject line of your email.

christian.streit@aas.ru

All work must be shown to explain your solution.