## Warm=Up Puzzle

Set Theory

- An examination in three subjects, Algebra, Biology, and Chemistry, was taken by 41 students. The following table shows how many students failed in each single subject and in their various combinations.

| Subjects: | $A$ | $B$ | $C$ | $A B$ | $A C$ | $B C$ | $A B C$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Failed: | 12 | 5 | 8 | 2 | 6 | 3 | 1 |

- How many students passed all three subjects?
- Hint: Represent A, B, and C as sets

