HW1 COMMON MISTAKES

Question 1, part (f): either the student forgets 17 or puts 15, which hints to the fact that not everyone noticed that $B$ is the set of prime numbers.

Question 2: this is a quite recurring error: instead of writing $\{5n \mid n \in \mathbb{N}\}$ students write $|n|5n$.

Question 3: many forgot to say if the proposition is true or not. The part that gave most problems is the last one as sometimes students write something like $P \Rightarrow R \land Q$.

Question 4 part (e): a recurring error in the lack of understanding that even if an argument is obvious, it still should be proved, rather than to rewrite the statement. They write: since 2 is a factor of $a$ and also 3 is, then 6 is a factor of $a$, without arguing why they can say that. Sometimes in the proofs students try to argue by contrapositive but they fail to write a correct proof.

In questions 4 and 6: errors such as: $n|a$ and $n|b$ so there exists $k$ such that $a = nk$ and $b = nk$, as if this was true for the same $k$. 