Hints to homework 3:

- 1. Just be careful that when negating quantifiers you have to switch "for all" and "there exists" and you do not change what comes after the quantifier. Also make sure to negate the inequality correctly.
- 2. Notice if the hypothesis is false, then the statement is always true.
- 3. For (c), consider what happens when both 3 and 4 divide n. For (d), consider addition mod 3 and mod 4.

The rest are pretty straight forward.