1. The negation of a -assignment is also an -assignment because flipping the truth value of each literal inside is ; the pair of literals that oppose each other is still opposing each other.
2. To prove that this is NP-complete, we need to prove that it is both NP and NP-hard. It’s obviously in NP because it’s easy to verify in polynomial-time whether a potential answer is a -assignment (see if each clause has a pair of opposing literals).

To prove it’s NP-hard, assume for the sake of contradiction that there exists a -solver that tells us whether a 3-CNF has a -assignment. We can use this solver to solve any 3-SAT problem. The polynomial-time conversion from a 3-SAT problem to -SAT is as follows: