1   Fixed Parameter Tractable?

Consider the following infinite collection of problems:

- For $k \geq 1$, k-FIXEDCLIQUE is the problem of deciding if a given graph has a clique of size k.

- For $k \geq 2$, k-NEARSAT is the problem of deciding if a given 3-CNF has a variable assignment that satisfies all but k of the clauses.

- For $k \geq 1$, k-GG is the problem of deciding if a given directed graph of maximum out degree k has a winning move in Generalized Geography.

For each problem, state whether the problem is PSPACE-complete, NP-complete, or in P. Keep in mind that the different values of k may put the problem in a different class. For example, 2-SAT is in P and 3-SAT is NP-complete. Instead of providing a full justification, just provide the necessary algorithms and reductions with no proof of correctness.