Solution
To solve this problem, we first want to show that Mono Sat is in NP. If given a solution to this problem, we can verify its correctness by checking that the solution is of size k and then seeing if it satisfies the expression. So Mono Sat is in NP.
Though this problem mentions satisfiability, it appears to be a covering problem, so we will use Vertex Cover to show that $VertexCover <_p MonoSat$. Given an instance of Vertex Cover (G, k), we want to transform it into an instance of Mono Sat $((T, C), k)$, where T is the set of terms and C is the set of clauses. Graph G is a vertex set and an edge set. We can imagine this graph to represent Mono Sat where each vertex is a term $\in T$ and each edge joins terms that are in the same clause C. A solution to Mono Sat then becomes a vertex cover for our graph G where we want to set the terms in our vertex cover to 1 to satisfy the expression. So we can see that if we have a Vertex Cover of size k then we have a solution to Mono Sat of size k and if there is no such vertex cover, then we do not have a solution.