Evan Wilcox Test 2 Crib Sheet 5/16/19

**Dynamic Programming**

Method of solving problems that have overlapping subproblems or when subproblems share subsubproblems. A dynamic-programming algorithm solves each subsubproblem just once and then saves its answer in a table, thereby avoiding the work of recomputing the answer every time it solves each subsubproblem. Typically applied to optimization problems.

Principle of Optimality – principle that says that regardless of what has happened before everything going forward will be optimal. A problem has the exhibits the principle of optimality if it has optimal substructure.

Optimal Substructure – a problem exhibits optimal substructure if

Overlapping Subproblems -

Greedy Method –

Heap Sort –