Topics you know		Do not tick if you don't know	
		Yes	A little
Data structures and libraries	Basic data types, big integers, basic data structures (including maps and sets),		
	union-find structure,		
	augenting binary search trees,		
	segment tree,		
	Fenwick or binary indexed tree,		
	C++ and java libraries		
Problem solving paradigms	Complete search,		
	divide and conquer,		
	greedy algorithms,		
	dynamic programming: 1-dimensional DP, 2-dimentional DP, interval DP, tree DP, subset DP		
Combinatorial games	Simple games,		
	decision tree,		
	Minimax algorithm,		
	Nim game, Grundy numbers (Nimbers)		
Graphs	Directed acyclic graphs, bipartite graphs, Bridges, connected components, strongly connected components,		
	topological sort,		
	Kruskal's algorithm, minimum spanning tree		
	Floyd-Warshall algorithm, all pairs shortest paths		
	Bellman-Ford Algorithm, single source, edge may be -ve		
Network flow	Ford Fulkerson's Method, Edmonds Karp's algorithm,		
	min-cost max-flow algorithm		
	applications (e.g. bipartitie matching, airline scheduling, project selection).		
Topics you know		Do not tick if you don't know	
		Yes	A little
Mathematics	Basics: sum of powers, fast exponentiation, logarithm;		

	Number theory: modular arithmetic, gcd and lcm, Chinese remainder theorem, primality testing, prime sieves		
String processing	Knuth Morris Pratt algorithm,		
	string matching with DP,		
	suffix trie/tree/array		
Computational geometry	Points, vectors, line segments, dot product, cross product (area of a triangle, counter-clockwise, whether two line segment intersect), polygons,		
	convex hull, point in convex polygon,		
	point in concave polygon,		
	closest pair of points		