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PROBLEMS STUDIED (IF CIRCLED THEN IT'S IN P OTHERWISE IT'S NP-COMplete)	REDUCTION STUDIED? REDUCED FROM:	ALGORITHM STUDIED?
<u>SHORTEST PATH</u>		
CIRCUIT-SAT	FIRST PROBLEM SHOWN IN NPC.	
SAT	CIRCUIT-SAT	
3-CNF-SAT	SAT	
CLIQUE	3-CNF-SAT	
VERTEX COVERING PROBLEM (VERTEX-COVER)	CLIQUE	APPROX. ALG. $\rho = 2.$
HAMILTONIAN CYCLE PROBL (HAM-CYCLE)	VERTEX-COVER	BACKTRACKING
HAMILTONIAN PATH PROBL.	EXERCISE	
TRAVELING SALESMAN PROB. (TSP)	HAM-CYCLE	APPROX. ALG FOR TSP WITH Δ INEQUALITY $\rho = 2.$
SET COVERING	EXERCISE	APPROX. ALG. $\rho = \ln 2 \approx 0.69$
WEIGHTED VERTEX COVER		APPROX. ALG. USING L.P. $\rho = 2.$
GRAPH COLOURING (COLOUR)	3-COLOUR 3-CNF-SAT	BACKTRACKING
KNAPSACK		BRANCH AND BOUND
<u>LINEAR PROGRAMMING</u>		
INTEGER PROGRAMMING	EXERCISE	
PARALLEL MACHINE SCHEDUL.		APPROX. ALG. $\rho = 2.$