

\* Algorithms

the definitions of (1) *NP-Complete Problem* and (2) *Polynomial-Transformation*.

the set of clauses over a finite set  $U = \{a, b, c\}$ :

$$\{a + b, \bar{a} + \bar{b}, a + c, \bar{a} + \bar{c}, b + c, \bar{b} + \bar{c}\}.$$

satisfying truth assignment ?

the matrix chain product problem for the instance of  $A_{14 \times 12}$ ,  $B_{12 \times 2}$ ,  $C_{2 \times 7}$ ,  $D_{7 \times 8}$

Dynamic-Program to solve the Shortest Paths in the following Graph :

HC  $\alpha$  TSP.

the Backtracking Algorithm to solve the Traveling Salesman Problem: