The Complete Problem Solver
Book Notes

My notes for *"The Complete Problem Solver"* book by John R. Hayes. - *Jugurtha Hadjar*

Introduction

What is a problem?

Whenever there is a gap you don't know how to cross between where you are now and where you want to be.

What does it mean to solve a problem?

Finding the appropriate way to cross a gap. A process with two major parts:

- Representing the gap
- Searching for a means to cross it

6 aspects of human problem solving?

1. **R**epresentation
2. **I**nvention
3. **S**earch Among Many Alternatives
4. **D**ecision Making
5. **M**emory
6. **K**nowledge

RISK, MD.

1 The Process of Representation

What is the general sequence of problem solving

1. Finding the Problem (recognition)
2. Representing the Problem (get gap's nature)
3. Planning the Solution (choose method to cross gap)
4. Carrying out the Plan
5. Evaluating the Solution (how good is the result?)
6. Consolidating Gains (learning from the experience)

- Easy problems: ordered sequence, easily.
- Hard problems: backtracking.