

УДК 004.023

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PROBLEM SOLVING METHODS (HEURISTIC METHODS)

A heuristic technique , often called simply a heuristic, is any approach to problem solving or self-discovery that employs a practical method, not guaranteed to be optimal, perfect, logical, or rational, but instead sufficient for reaching an

immediate goal. Where finding an optimal solution is impossible or impractical, heuristic methods can be used to speed up the process of finding a satisfactory solution.

Heuristics can be mental shortcuts that ease the cognitive load of making a decision. Examples that employ heuristics include using a rule of thumb, an educated guess, an intuitive judgment, a guesstimate, profiling, or common sense.

Heuristics are the strategies derived from previous experiences with similar problems. These strategies rely on using readily accessible, though loosely applicable, information to control problem solving in human beings, machines, and abstract issues.

The most fundamental heuristic is trial and error, which can be used in everything from matching nuts and bolts to finding the values of variables in algebra problems.

In psychology, heuristics are simple, efficient rules, learned or hard-coded by evolutionary processes, that have been proposed to explain how people make decisions, come to judgements, and solve problems typically when facing complex problems or incomplete information. Researchers test if people use those rules with various methods. These rules work well under most circumstances, but in certain cases lead to systematic errors or cognitive biases.