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4 PAGES / PÁGINAS

Candidate session number: / Numéro de session du candidat: / Número de convocatoria del alumno:

21 N 720 P 3 - C S H L

Candidate name: / Nom du candidat: / Nombre del alumno:

Attempt 1

At the start of each answer to a question, write the question number in the box using your normal hand writing / Avant de répondre à une question, inscrivez son numéro à la main dans la case appropriée / Al comienzo de cada respuesta, escriba a mano el número de pregunta en la casilla.

Example
Ejemplo

27

27

Example
Ejemplo

3

3

3

Heuristic algorithms are those that use "rules of thumb" to find a solution to a problem like a combinatorial optimisation problem.

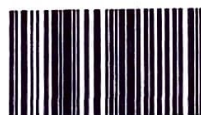
Non heuristic, or ~~definite~~ deterministic algorithms are those that aim to find the definite solution to a problem, like with brute force.

Both types of algorithms are effective at finding ~~set~~ solutions in different circumstances.

- Non heuristics work well when a problem is not computationally intractable, as they must explore the entire problem space.

- In contrast, non heuristics can attempt to find a 'good' solution to a computationally intractable problem by combining exploration with exploitation.

Importantly, ~~with~~ in order to make heuristics effective at optimising solutions, a variety of meta-heuristics must be set, ~~as~~ such as ~~selection method~~ so that the right strategies are used for each ~~part~~ separate ~~scenario~~ computationally intractable scenario.



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While a point of comparison is the ability of both heuristics and non-heuristics to find usually a good solution to a problem, a definite point of contrast is that heuristics, unlike non heuristics, will usually not fully optimize a solution (ie. reach a global optima). This is because heuristics tend to sacrifice accuracy for speed \rightarrow thus may find a good solution, but not the optimal solution.

