

Worksheet 22.1: for testing basic understanding

- 1 Explain why the traditional operation of an expert system cannot be defined as an example of machine learning.
- 2 Indicate whether each of the following statements is true or false:
 - A A neural network contains nodes in a graph.
 - B The ability to learn from experience is an indication of intelligence.
 - C Dijkstra's algorithm uses a heuristic function.
 - D A heuristic function can be based on a trial and error approach.
 - E The nodes in a graph represent artificial neurons.
 - F Dijkstra's algorithm computes a value for a path from one specified node to every other node in the graph.
- 3 a Explain the similarities between supervised, unsupervised and reinforced learning
b Explain the differences between supervised learning, unsupervised learning and reinforced learning.
c Explain which one of these requires a large databank.