

Topic: Intelligent agents and their environments

1. For each of the following assertions, say when it is true or false and support your answer with a brief explanation.
 - An agent that only sense partial information about the state cannot be perfectly rational.
 - A perfectly rational poker player agent never loses.
 - There exists task environments in which no pure reflex agent can behavior rational
2. Give a PEAS description of the task environment and characterize it in terms of the properties lists in Section 2.3.2.
 - Playing tennis
 - Solving a Sodoku puzzle
 - Playing Solitaire
 - Juggling flaming torches