



# NCB + MDP + DN

0 favorites

1 play

7 players

## A private kahoot

### Questions (10)

1 - Quiz

**Given Bayes Theorem formula, which one is the “posterior probability?”**

20 sec

- |                                                                                    |                         |   |
|------------------------------------------------------------------------------------|-------------------------|---|
|    | <b>P (class   data)</b> | ✓ |
|    | <b>P (data   class)</b> | ✗ |
|    | <b>P (class)</b>        | ✗ |
|  | <b>P (data)</b>         | ✗ |

2 - Quiz

**Given Table 1, calculate the probability  $P(\text{pos} \mid \text{“Shape == Circle”})$** 

60 sec

- |                                                                                    |       |   |
|------------------------------------------------------------------------------------|-------|---|
|  | 4 / 6 | ✗ |
|  | 2 / 4 | ✓ |
|  | 3 / 6 | ✗ |
|  | 2 / 3 | ✗ |

3 - True or false

**Is this statement correct?  $P(\text{pos}, \text{“Shape == Circle”}) \leq P(\text{pos} \mid \text{“Shape == Circle”})$** 

60 sec

- |                                                                                    |       |   |
|------------------------------------------------------------------------------------|-------|---|
|  | True  | ✓ |
|  | False | ✗ |

4 - True or false

**The following is a correct Naïve Bayes Classifier formulation.**

30 sec



True



False



5 - Quiz

**One of these is FALSE for a Naïve Bayes Classifier.**

30 sec



Inputs attributes are assumed to be Mutually Independent



Classes are used to have a Uniform Prior



Inputs attributes are ALWAYS assumed to be discrete.



Probability density function deals with continuous inputs



6 - Quiz

**A Markov Decision Process is a 4-tuple  $(S, A, P, R)$ . Select the INCORRECT option.**

20 sec



S -&gt; A set of "States"



A -&gt; A set of "Probabilities of Action"



P -&gt; Probability of "moving from one state to another!"




R -&gt; Expected immediate "Rewards" for an action



## 7 - Quiz

**What is a policy in a Markov Decision Process?**

20 sec

-  A set of recommended action ✓
-  A set of probabilities ✗
-  A set of states ✗
-  A set of rewards ✗

## 8 - Quiz

**What is the purpose of a Decision Network?**





20 sec

-  Parallel decision making ✗
-  Sequential Decision Making ✓
-  Classification ✗
-  Reasoning ✗

## 9 - Quiz

**What is a policy in Decision Network?**





20 sec

-  A set of mapping for each nodes ✗
-  A set of mapping for each decision nodes ✓
-  A set of mapping for value node ✗
-  A set of mapping for chance node ✗

10 - Quiz

**How optimal policy in a decision network is computed?**

20 sec

-  Sequentially in forward direction for all decision nodes ✗
-  Sequentially in forward direction for all chance node ✗
-  Sequentially in backward direction for all decision nodes ✓
-  Sequentially in backward direction for all chance node ✗