

Mini-Assignment: Introduction to Machine Learning

Due Jan 23 at 11:59pm **Points** 4 **Questions** 2
Time Limit None **Allowed Attempts** 2

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	less than 1 minute	4 out of 4

⚠️ Answers will be shown after your last attempt

Score for this attempt: 4 out of 4

Submitted Jan 20 at 6:41pm

This attempt took less than 1 minute.

Question 1

2 / 2 pts

Consider two events, A and B. These two events are DISJOINT. If $P(B) > 0$, what is $P(A|B)$?

☐ 0.5

☒ 0

Correct, disjoint events cannot co-occur so the probability of A occurring given that B has occurred is zero.

☐ 1

☐ 0.25

Question 2**2 / 2 pts**

Suppose that the PDF of a random variable is as follows:

$$f(x) = \begin{cases} \frac{4}{3}(1 - x^3) & \text{for } 0 \leq x \leq 1 \\ 0 & \text{otherwise} \end{cases}$$

What is the value of $P(X < 0)$?

☐ 0.5

☐ 2/3

☐ 1

☒ 0

Correct, the PDF is 0 whenever X is less than 0, so the total probability is also 0.

Quiz Score: **4** out of 4