## **Probability Quiz**

Due No due date Points 2
Available after Mar 10 at 12:55
Allowed Attempts Unlimited

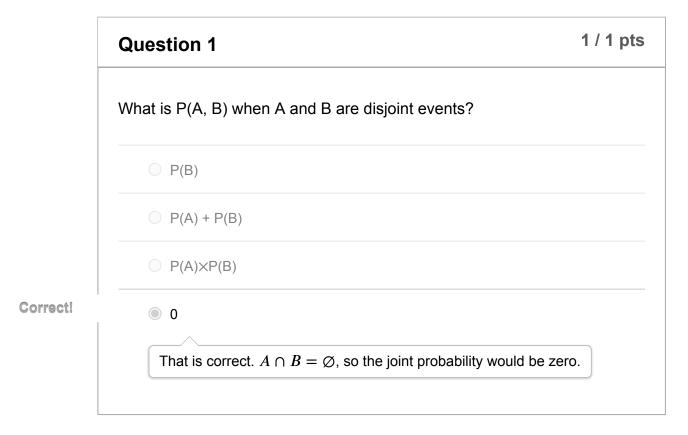
Questions 2
Time Limit None

Take the Quiz Again

## **Attempt History**

	Attempt	Time	Score
LATEST	Attempt 1	12 minutes	2 out of 2

## Submitted Mar 23 at 19:09



Question 2 1/1 pts

The completion of a construction project may be delayed due to rain. The probability of having rain is 0.6, the probability of completing the project on-time when there is no rain would be 0.85, and the probability of completing the project on-time when there is rain would be 0.35. Calculate the probability of completing the project on-time.

0.21

0.35

0.85

Correct!

0.55

A: Completing the project on-time, B: Having rain, B': No rain.

Using marginalisation, we can calculate the probability of A considering all possibilities of rain including B and B':

$$P(A) = P(A, B) + P(A, B') = P(B) \times P(A|B) + P(B') \times P(A|B') = 0.6 \times 0.35 + 0.4 \times 0.85 = 0.55$$