Congratulations! You passed!

TO PASS 75% or higher

Keep Learning

GRADE
88.88%

Practice quiz on Bayes Theorem and the Binomial Theorem

TOTAL POINTS 9

1. A jewelry store that serves just one customer at a time is concerned about the safety of its isolated customers. **1 / 1 point**

The store does some research and learns that:

- 10% of the times that a jewelry store is robbed, a customer is in the store.
- A jewelry store has a customer on average 20% of each 24-hour day.
- The probability that a jewelry store is being robbed (anywhere in the world) is 1 in 2 million.

What is the probability that a robbery will occur while a customer is in the store?

- $\frac{1}{500000}$
- $\frac{1}{2000000}$
- $\frac{1}{4000000}$
- $\frac{1}{5000000}$

Correct

What is known is:

A: "a customer is in the store," $P(A) = 0.2$

B: "a robbery is occurring," $P(B) = \frac{1}{2,000,000}$

$P(\text{a customer is in the store} \mid \text{a robbery occurs}) = P(A \mid B)$