Exercise: Conditional expectation example

(1/1 point)

The random variable Q is uniform on $[0,1]$. Conditioned on $Q=q$, the random variable X is Bernoulli with parameter q. Then, $\mathbf{E}[X \mid Q]$ is equal to:

- q
- Q ✔
- $1-q$
- $1-Q$

Answer:
We have $\mathbf{E}[X \mid Q=q]=q$, for all $q \in [0,1]$, which translates into the abstract statement $\mathbf{E}[X \mid Q]=Q$.

You have used 1 of 1 submissions