Chapter 6 Quiz

Due Feb 24 at 11:59pm **Points** 5 **Questions** 5
Available until Feb 24 at 11:59pm **Time Limit** None

Instructions

Chapter 6 Quiz

Please read: Chapter-6---Inferring-a-Binomial-Probability-via-Exa_2015_Doing-Bayesian-Dat.pdf (https://canvas.ou.edu/courses/231426/files/44565676/download?download_frd=1)

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	85 minutes	4 out of 5

Score for this quiz: **4** out of 5

Submitted Feb 24 at 6:18pm

This attempt took 85 minutes.

Question 1

0 / 1 pts

If $f(x|\theta)$ is a Binomial likelihood then in general $\sum_{\theta} f(x|\theta) = 1$

ou Answered

TRUE

orrect Answer

FALSE

Question 2

1 / 1 pts

$B(a, b) = \int_0^1 \theta^{a-1}(1-\theta)^{b-1}\,d\theta$ then $B(2, 4) = ?$

$B(a,b) = \int_0 \theta^{\cdot} \cdot (1-\theta)^{\cdot} \cdot d\theta$, then $B(2,4) = ?$

- 1/40
- 1/30

Correct!

- 1/20
- 1/10
- 1/5

Use BernBeta.R provided by the Book. Ensure that the directory holding BernBeta.R is the working directory. You may need a new window for the plot.

The following questions relate to the making of a posterior and recycling it as a prior. That is think of an experiment having three stages:

> i. Toss a coin once and get a H, prior = Beta(3,3).
> ii. Toss the same coin and get a T, prior = post from a.
> iii. Toss the same coin again and get a H, prior = post from b.

Question 3

1 / 1 pts

The posterior created in i. is:

- Beta(3,5)
- Beta(3,4)

Correct!

- (●) Beta(4,3)
- ( ) Beta(5,3)
- ( ) Beta(4,4)

Question 4

1 / 1 pts

The posterior calculated by the function in ii. is:

- ( ) Beta(3,3)
- ( ) Beta(2,2)
- ( ) Beta(5,5)

Correct!

- (●) Beta(4,4)
- ( ) Beta(4,5)

Question 5

1 / 1 pts

The posterior calculated by the function in iii. Is:

- ( ) Beta(4,5)

Correct!

- (●) Beta(5,4)
- ( ) Beta(5,5)

- Beta(6,5)
- Beta(5,6)

Quiz Score: **4** out of 5