



Week 3 Lab



7/11 points earned (63%)

You haven't passed yet. You need at least 80% to pass.

Review the material and try again! You have 3 attempts every 8 hours.

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1 / 1
points

1.
How many of the 13 variables are categorical?

☐ 5

☐ 6

☒ 7



Correct

☐ 8



0 / 1
points

2.
Which of the following best describes the distribution of **weight**?

☐ Left skewed

☐ Right skewed

☐ Uniformly distributed



Normally distributed

**This should not be selected**1 / 1
points

3.

Which of the following corresponds to the 99% credible interval for the average birth weight of all children born in North Carolina?



(7.00 , 7.19)



(6.98 , 7.22)

**Correct**

(6.94 , 7.26)



(6.94 , 7.27)

1 / 1
points

4.

Based of Jeffrey's scale for interpretation of a Bayes factor how should we describe the evidence in favor of H_1 from the results above?



Not worth a bare mention



Positive

**Correct**

Strong



Very Strong

1 / 1
points

5.

Which of the following is **false** about the relationship between habit and weight?

- ☐ Median birth weight of babies born to non-smoker mothers is slightly higher than that of babies born to smoker mothers.
- ☐ Range of birth weights of babies born to non-smoker mothers is greater than that of babies born to smoker mothers.
- ☒ Both distributions are extremely right skewed.

**Correct**

The IQRs of the distributions are roughly equal.

1 / 1
points

6.

Based on the credible interval is there evidence that smoking reduces birth weight?

- ☒ Yes

**Correct**

No

1 / 1
points

7.

Based on the Bayes factor calculated above, how strong is evidence against H_1 ?

- ☒ Not worth a bare mention

**Correct**

Positive



Strong



Very Strong



0 / 1
points

8.

How would the Bayes factor above change if we were to increase the prior probability of H_2 ?



Get bigger



Get smaller



This should not be selected



Stay the same



0 / 1
points

9.

How would the Bayes factor above change if we were to change the prior of p to be $Beta(75, 925)$?



Get bigger



Get smaller



Stay the same



This should not be selected



1 / 1
points

10.

These data provide _____ evidence _____ smoking affecting the chance of low birth weight.

- ☐ weak; for
- ☐ strong; for
- ☒ weak; against



Correct

- ☐ strong; againt



0 / 1
points

11.

These data provide _____ evidence _____ smoking affecting the chance of premature birth.

- ☐ weak; for
- ☒ strong; for



This should not be selected

- ☐ weak; against
- ☐ strong; againt

