Exercises for Bayesian factors

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Consider again the reading time data come from Experiment 1 of Grodner and Gibson (2005). We'll try to quantify the evidence against the null model (no difference between SRC and ORC) relative to the following alternative models:

a. $\beta \sim Normal(0, 1)$
b. $\beta \sim Normal(0, .1)$
c. $\beta \sim Normal(0, .01)$
d. $\beta \sim Normal_+(0, 1)$
e. $\beta \sim Normal_+(0, .1)$
f. $\beta \sim Normal_+(0, .01)$

(A $Normal_+(.)$ prior can be set in brms by defining a lower boundary as 0, with the argument `lb = 0`.)

What is the Bayes factor against the null and in favor of the alternative models a-f?

References

Grodner, Daniel, and Edward Gibson. 2005. "Consequences of the Serial Nature of Linguistic Input." *Cognitive Science* 29: 261–90.