Interactions

Homework #7

Due Thursday, Feb 19, 2026

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Homework

Preliminary Information

In previous regression-modeling exercises, we assumed that the effects of the different predictor variables were independent. Here, we practice developing linear regression models that account for *interactions*, where the effect of one variable depends on the value of another.

Homework Exercises:

Self-study: Work these exercises, but do not turn them in.

- Exercises 8E1–8E3

Turn in: Work these exercises and turn them in.

- Exercises 8M1, 8M4

Optional: The following exercises are optional. You can turn them in for extra credit.

- Exercises 8H1–8H2

Notes on Homework:

"You can download a PDF copy of the exercises from chapters 8 and 9 of *Statistical Rethinking* from
https://ees5891.jgilligan.org/files/homework_docs/McElreath-Ch-8-9-homework.pdf