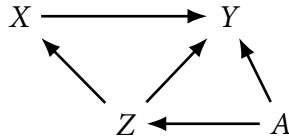


STATISTICAL RETHINKING 2026  
HOMEWORK A06

Consider the DAG below:



I want you to first simulate data consistent with this DAG. You can assume that each variable is normally distributed. Then focus on estimating the causal effect of  $X$  on  $Y$ . Which other variables are needed to correctly estimate the effect of  $X$  on  $Y$ ? For any variables other than  $X$ , what is the meaning of their estimated coefficients? Are they also causal effect estimates? Why or why not?