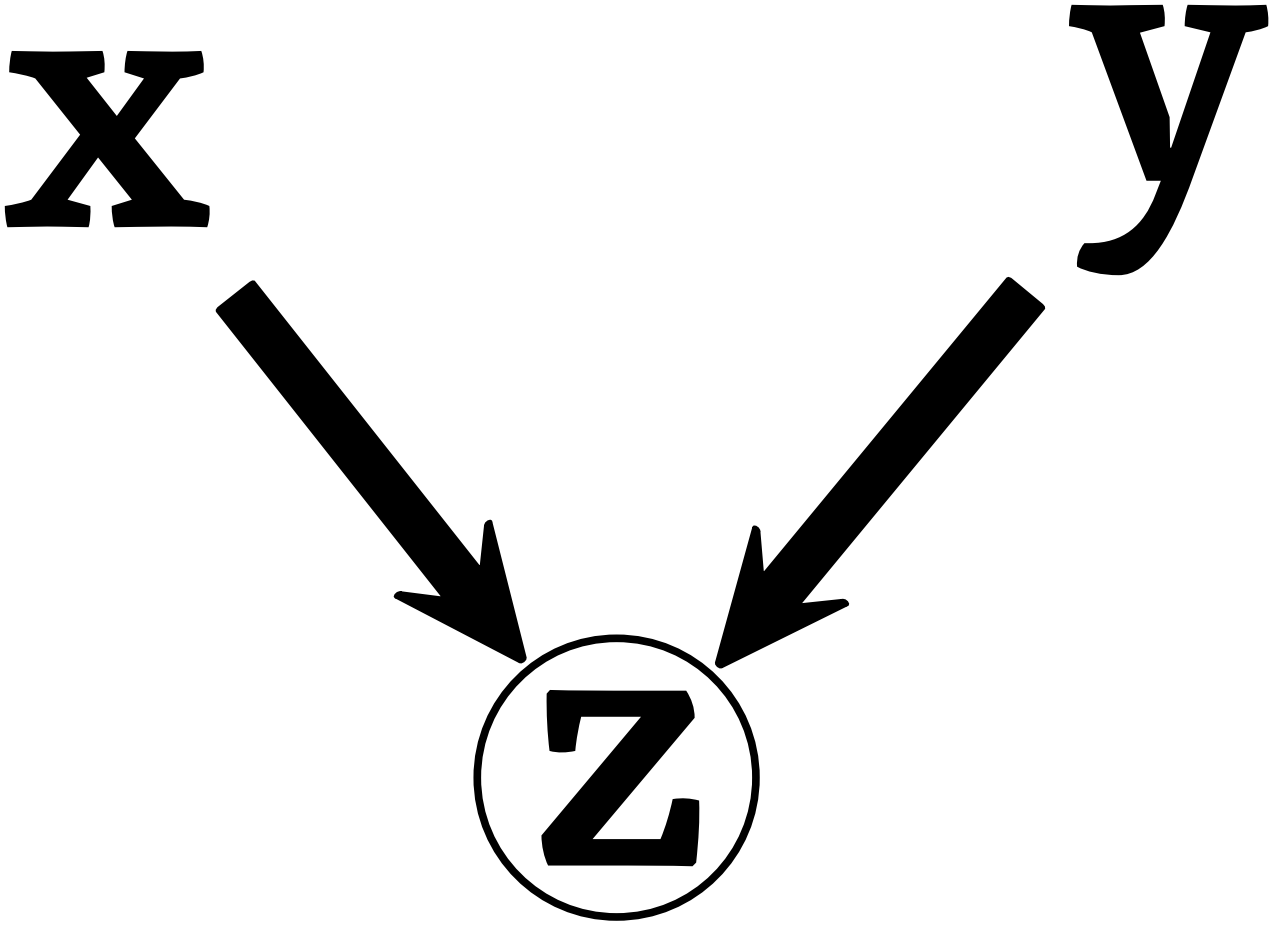
No effect of x on y, but both affect z


X
Y
Z

Math

$$y \sim Normal(0,1)$$

$$x \sim Normal(0,1)$$

$$z \sim Bernoulli(logit^{-1}(2x + 2y - 2))$$

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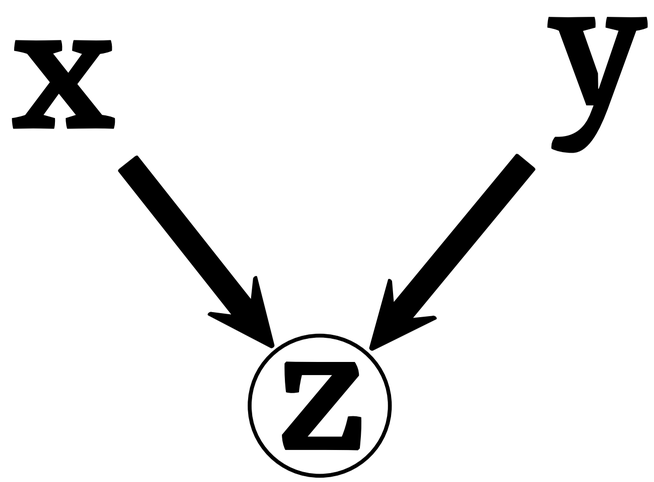

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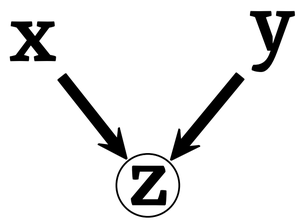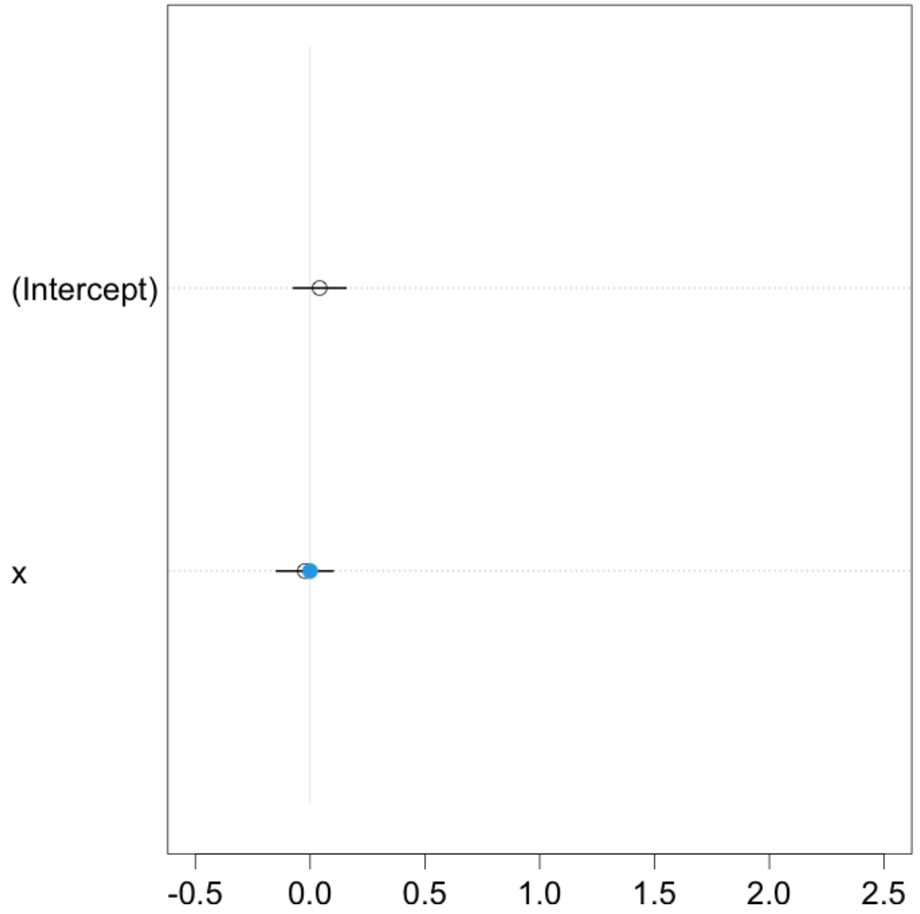
```
set.seed(1)
N = 200
x = rnorm(N)
y = rnorm(N)
z = rbinom(N, 1, inv_logit(2*x + 2*y - 2))

m1 = lm(y ~ x)

> (pm1 = precis(m1))
              mean   sd  5.5% 94.5%
(Intercept)  0.04 0.07 -0.07  0.16
x           -0.02 0.08 -0.15  0.10
```