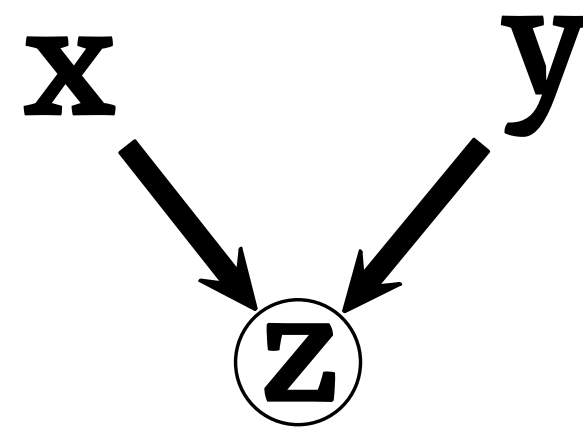


# No effect of x on y, but both affect z

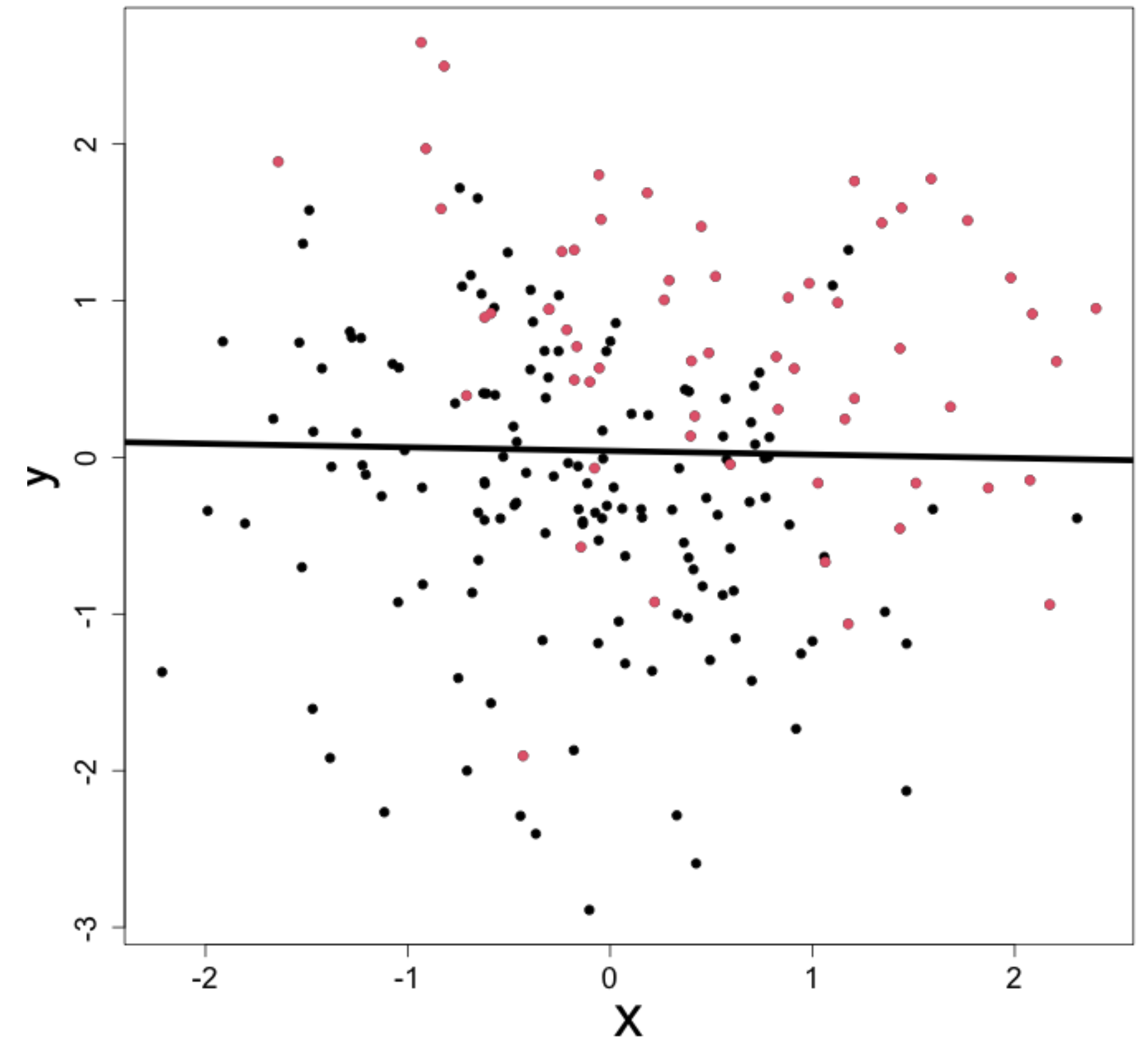
```
set.seed(1)
N = 200
x = rnorm(N)
y = rnorm(N)
z = rbinom(N, 1, inv_logit(2*x + 2*y - 2))
```



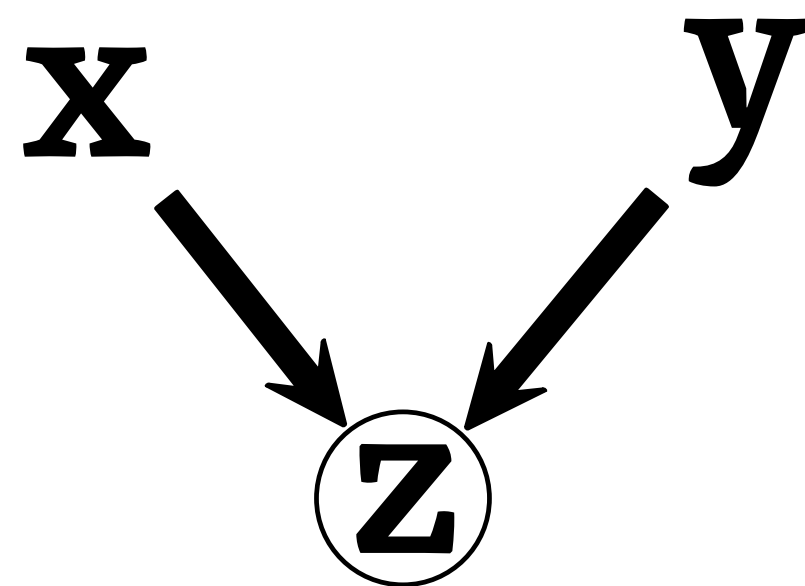
```
m1 = lm(y ~ x)
```

```
> (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



# Now, the model with the collider $z$



```
> m2 = lm(y ~ x + z)
```

```
> (pm2 = precis(m2))
```

	mean	sd	5.5%	94.5%
(Intercept)	-0.29	0.08	-0.41	-0.17
x	-0.23	0.07	-0.35	-0.12
z	1.13	0.15	0.90	1.37

