```
# simulate a sample of 10 people
set.seed(93)
H <- runif(10,130,170)
W <- sim_weight(H,b=0.5,sd=5)

# run the model
library(rethinking)
m3.1 <- quap(
    alist(
        W ~ dnorm(mu,sigma),
        mu <- a + b*H,
        a ~ dnorm(0,10),
        b ~ dunif(0,1),
        sigma ~ dunif(0,10)
    ) , data=list(W=W,H=H) )

# summary
precis( m3.1 )
```

```
       mean   sd  5.5% 94.5%
a      5.19 9.43 -9.88 20.26
b      0.49 0.07  0.38  0.59
sigma 5.64 1.29  3.57  7.71
```

Vary slope and make sure posterior mean tracks it

Use a large sample to see that it converges to data generating value

Same for other unknowns (parameters)