

Enough grid approximation

We'll use quadratic approximation for the rest of the first half of the course.

$$W_i \sim \text{Normal}(\mu_i, \sigma)$$

$$\mu_i = \alpha + \beta H_i$$

$$\alpha \sim \text{Normal}(0, 10)$$

$$\beta \sim \text{Uniform}(0, 1)$$

$$\sigma \sim \text{Uniform}(0, 10)$$

```
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) )
```