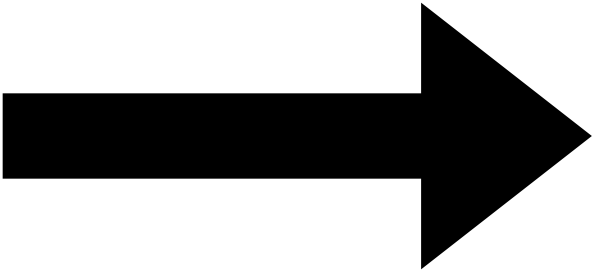
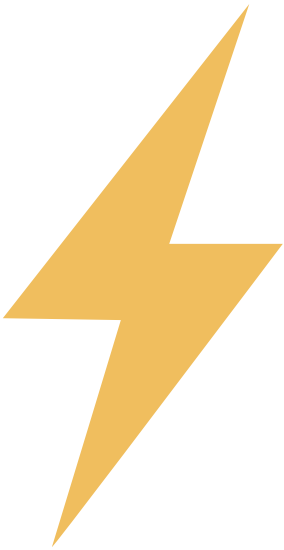


Posterior samples

```
> samples
# A tibble: 2,000 × 3
      a          b      sigma
  <dbl[1d]> <dbl[1d]> <dbl[1d]>
1    115.    0.889    4.78
2    109.    1.02     5.30
3    112.    0.928    5.07
4    111.    0.949    5.30
5    111.    0.955    5.04
6    115.    0.872    5.19
7    109.    1.01     5.13
8    117.    0.844    5.00
9    115.    0.882    4.94
10   112.    0.939    4.95
# ... with 1,990 more rows
```



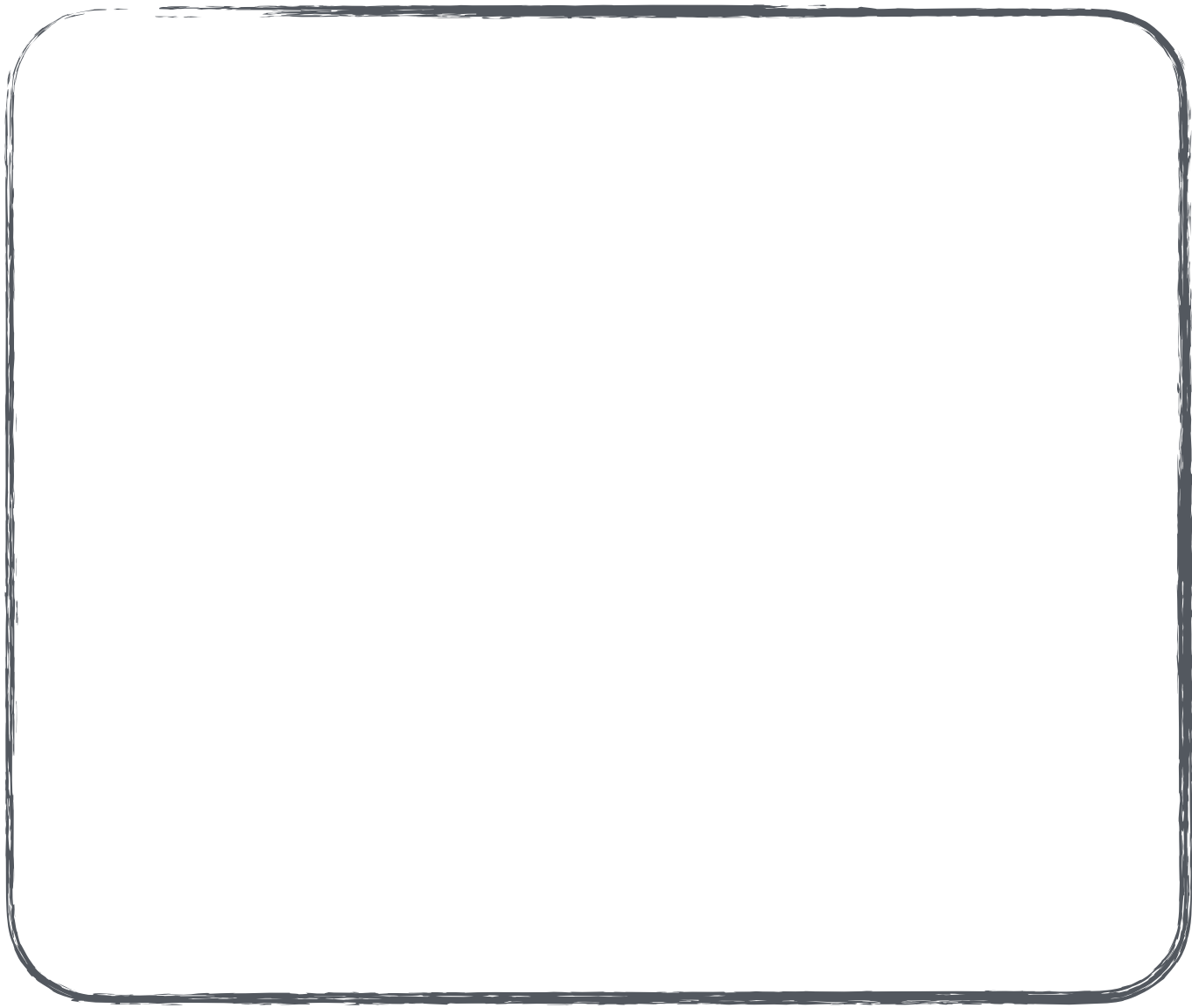


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$$y_i \sim \text{Normal}(\mu_i, \sigma)$$

$$\mu_i = \alpha + \beta x_i$$

$$\alpha \sim \text{Normal}(0, 20)$$

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

$$\sigma \sim \text{Exponential}(1)$$

Posterior samples

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

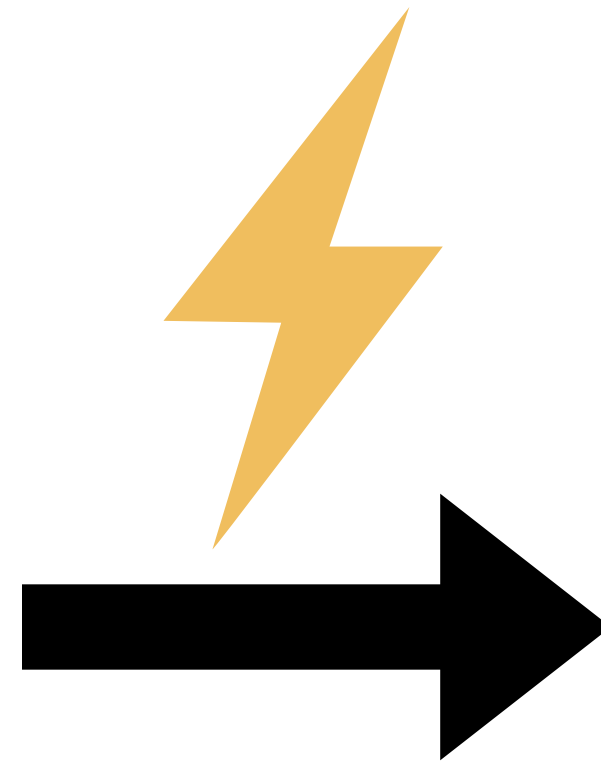
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FIT!



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# ... with 1,990 more rows
```

Posterior mean estimates

$E_y[\theta] =$

```
> colMeans(samples)
      a      b    sigma
112.9296580  0.9253803  5.0453651
```