Today

- Questions from homework?
- Coding an MCMC algorithm
- An example to work on

Rosenbluth algorithm

aka Metropolis-Hastings

With your linear data

Algorithm (original)

```
for many iterations
    propose new value for parameter:
        draw Unif(-max_d, max_d)
        proposal = current parameter + draw
    calculate the probability of accepting the proposal:
        P_accept = min(Pr(proposal) / Pr(current), 1)
    accept proposal randomly with Bern(P_accept)
plot posterior distribution (histogram) of parameter values
```

where Pr() = prior x likelihood