# Birthday Matches <br> 18.05 Spring 2014 

## OUR RELATIONSHIP ENTERED ITS DECLINE AT THIS POINT.



## Birthday Matches

There are $n$ people gathered in a room. What is the probability that at least 2 of them will have the same birthday?

- Use an R simulation to estimate this for various $n$.
- Find the smallest value of $n$ for which the probability of a match is greater than .5.
- Explore how the number of trials in the simulation affects the variability of our estimates.


## At least 2, 3, or 4 people match



## Here's Johnny

```
Johnny Carson attempt 1
http://www.cornell.edu/video/
the-tonight-show-with-johnny-carson-feb-6-1980-excerpt
```

Attempt 2 after getting hate mail from mathematicians http://www.cornell.edu/video/
the-tonight-show-with-johnny-carson-feb-7-1980-excerpt
Attemp 3 http://www.cornell.edu/video/
the-tonight-show-with-johnny-carson-feb-8-1980-excerpt
Here is the full NY Times article
http://opinionator.blogs.nytimes.com/2012/10/01/
its-my-birthday-too-yeah/

MIT OpenCourseWare
https://ocw.mit.edu

### 18.05 Introduction to Probability and Statistics

Spring 2014

For information about citing these materials or our Terms of Use, visit: https://ocw.mit.edu/terms.

