Agenda   Midterm 2 review

1. Hypothesis testing
2. Simulation
3. Normal approximation
4. Confidence intervals
5. Simple probability
6. Conditional probability

Hypothesis testing   When do we use it? How do we set up hypotheses? What sort of sampling distribution do we use?

Simulation   When do we use it? How does it work?

Normal approximation   When do we use it?

```
qnorm(c(.90, .95, .975, .995))
```

```
## [1] 1.281552 1.644854 1.959964 2.575829
```

```
pnorm(c(-3, -0.5, 1, 2, 3))
```

```
## [1] 0.001349898 0.308537539 0.841344746 0.977249868 0.998650102
```

Confidence intervals   When do we use them? What sort of sampling distribution do we use?

Simple probability   What sorts of questions can it answer?

Conditional probability   What sorts of questions can it answer?