





Distribution of Means

Monte-Carlo Studies



Distributions



- ▶ There are lots of distributions.
- ▶ Today we are looking at "Uniform" and "Normal" distributions.
- ▶ Uniform:
 - ▶ Each outcome as likely as all others.
 - ▶ Throwing a die.
- ▶ Normal:
 - ▶ Multiply determined events.
 - ▶ Adult height = genetics + nutrition + hormones etc.



Normal Distribution

- ▶ “Normal” refers to the shape of the distribution.
- ▶ If you take enough random samples of the means from a normal distribution, they form a normal distribution!
- ▶ It’s totally awesome!
- ▶ But is there a way to show that?
- ▶ Absolutely!
- ▶ Let’s do it!
- ▶ But how?????