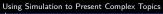
## Using Simulation to Present Complex Topics

Ryan Honea

9/30/2017

- 1 Introduction: Why Simulate?
- 2 The "Traditional" Statistics Course
- 3 Elevating the Statistics Course
- 4 Conclusion



☐Introduction: Why Simulate?

Introduction: Why Simulate?

└Why Simulate?

#### Why Simulate?

#### Common Questions:

- Is it worthwhile to teach programming?
- Wouldn't writing a simulation be hard?
- Why not just use theorems and proofs and other such nonsense?

## Why We Love Math

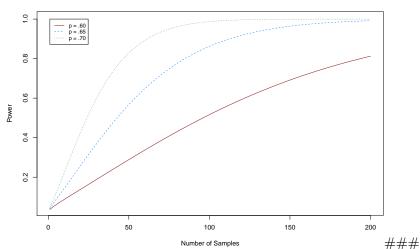
- Why do we love math?
- What drives students to love math?
- How can we utilize this information to enhance student's learning?

Introduction: Why Simulate?

Motivation

#### Why We Love Math: GRAPHS

#### Power versus Number of Samples for Sign Test



Why We Love Math: FUNctions ### Why We Love Math: It Just

# Senior Research Project

Context of this Presentation

#### The "Traditional" Statistics Course

Using Simulation to Present Complex Topics
Introduction: Why Simulate?
Context of this Presentation

#### More Intense Problems

The "Traditional" Statistics Course

Elevating the Statistics Course

#### Elevating the Statistics Course

Using Simulation to Present Complex Topics

Conclusion

#### Conclusion

Using Simulation to Present Complex Topics

Conclusion

## Conclusion

Using Simulation to Present Complex Topics
Conclusion
Acknowledgement

Acknowledgements