

MATH 2415, S23

Active Learning

John Zweck

# Dog One: Tisbe



# What is Active Learning?

**We use Active Learning in  
our Problem Session.**

**With Active Learning you will:**

- 1 Engage in mathematical reasoning
- 2 Solve problems with your fellow students
- 3 Explain your thinking to each other and the TA

# How Does Active Learning Work?

- You
  - Actively solve assigned problems
  - Work in small groups of 3-4 at white boards
  - Explain your solutions to each other and to TA's
  - Photograph your solutions
- The TA's and ULA's
  - Check in regularly with each small group
  - Mostly ask questions, but can answer "Yes" or "No"
  - Help you explain math: *"So you are saying...."*

# Why Do Active Learning?

Educational Research on STEM courses shows:

- 1 You learn significantly more with an active learning technique than with traditional methods
- 2 Your chance of failing with an Active Learning format is 66% less than with a traditional format

# Why Do Active Learning?

Your peers in a UT Dallas Calculus course say:

*“The problem sessions, too, were much better than any I’ve had in the past. They were relaxed, engaging, and helpful to my comprehension.”*

*“The problem sections were much more productive with the students working problems in groups as opposed to another lecture from the TA.”*

*“The structure of the problem sessions is the best I’ve ever seen. You get to learn by working with others. Allowing us to explain material with a TA’s guidance is highly beneficial.”*

# Dog Two: Lulu



# Why Do Active Learning?

One of your ULA's wrote:

*I took Math 2415 in my first semester here at UTD. I am now a senior and the active learning math lab for this course remains the most helpful math lab I've had. The ULA's I had were incredible, they opened my eyes to math being a subject that one can reason about.... I'd really like to help other students fall in love with math like I did through active learning.*



# Dog Three: Dalila (as puppy)

