

## Transcript: Approach 1 – Finding a Counterexample

Professional Development for Inservice Teachers  
University of Michigan School of Education  
Tuesday, May 29, 2012

### Seating Arrangement

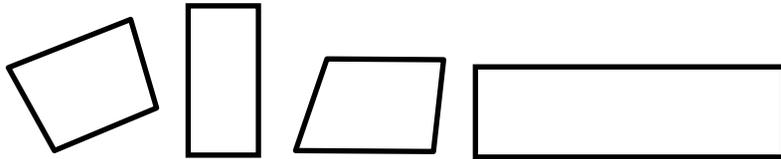
Megan						Rachel
Tamala						Brendan
Pete						Edie
Josh						Sherri
Anne						Liz
Martina						Valerie
	Shawn	Jennifer	Maria	Jackie	Tonya	Seth

### **May 29, 2012:**

#### *Justifying True-False Statements*

*Decide whether the following statements are true or false and develop a clear justification for your conclusion.*

*b) All polygons with four straight connected sides are quadrilaterals.*



- 1 Edie: I always sort of took the path of trying to prove it to be false, and when I couldn't, I would figure out if it was true.
- 2
- 3
- 4 Facilitator: You tried to prove it to be false?
- 5 Edie: Yes.
- 6 Facilitator: So how did you go about trying to prove it to be false?
- 7 Edie: Well I was trying to draw one that wasn't a quadrilateral. Could I make it a shape that had-
- 8
- 9 Facilitator: That had what? So what did it have to have?
- 10 Edie: It needed to have four sides, but- and connected. But could I draw one that wasn't necessarily four straight sides? So could I draw one where necessarily the sides weren't completely straight? More of an angle.
- 11
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- 14 Facilitator: Do people understand what Edie is saying? So what was Edie's approach? Can someone summarize that?
- 15
- 16 Participant: She kind of did the converse. Is that-
- 17 Shawn: Or disprove it?
- 18 Edie: I was trying to disprove it.
- 19 Facilitator: And do you understand what she was doing to try to disprove it? What was it?
- 20
- 21 Anne: Make them to be straight and connected.
- 22 Facilitator: I can't quite hear you. What?
- 23 Anne: Make them to be straight and connected, but not a quadrilateral.
- 24