

Reflective Essay 4: Due Wednesday, February 11, 2015

Directions: Your essay should be typed in a readable 12-point font. Include a heading on the first page with your name, date, Math 34001, and Essay n (for the appropriate number n). If there are multiple sheets, staple together the top left corners (in the correct order). Turn in at the start of class on the date due. Do not submit answers on notebook paper or via email.

The alien is intrigued by your description of mathematics and mathematicians. She wishes to probe the subject further. She asks you the following questions.

1. What does it mean for a mathematical statement to be considered true?
2. What is the role of proof in mathematics?
3. Is there only one type of proof?
4. Why do mathematicians prove theorems?

Unfortunately, her spaceship has disrupted your internet connection. Also, she has decided to use your copy of **The Mathematical Experience** as a coaster for her cup of tea. Furthermore, she is rather impatient. This means you will have to answer her based only on your own ideas and experience.