

## MA 330 ESSAY # 4

Choose ONE of the topics below for your essay. Be sure to provide evidence in support of your conclusion. Your essay should be typed, double spaced, 12 pt Times New Roman font, at least 750 words.

- (1) In some cases, actions that benefit individual mathematicians do not aid the overall goal of progress in the mathematical sciences. Using one of Cardano/Tartaglia, Newton/Leibnitz, or Bernoulli/L'Hôpital as a case study, discuss the ways that social norms and institutions provide perverse incentives to mathematicians. Do you think these episodes would have played out differently in a different era or culture? Be sure to provide evidence in support of your conclusions.

- (2) In your opinion, who deserves credit for the discovery of calculus? What, precisely, did this person or persons do that earns them this credit above all others? What criteria should one use when deciding who to credit with a mathematical discovery? Be sure to provide evidence in support of your conclusion.