

MA 330 HOMEWORK
DUE MONDAY, MAR 31

Chapters 6, 7 and 8 of *Journey Through Genius* discuss mathematics from the beginning of symbolic algebra and calculus; they are centered around the following “great theorems”: Cardan’s solution of the cubic, Newton’s approximation of π , and Bernoulli’s proof of the divergence of the harmonic series.

- For each of these theorems, explain what the theorem says and provide an outline of the proof given in *Journey Through Genius*. This outline can be in bulleted form or paragraph form, with or without diagrams. Your outlines should capture the fundamental ingredients, ideas, and methods of the proof.
- Choose your favorite proof of the three discussed above. Write one paragraph explaining why this proof is your favorite.

This homework should be typed and is worth 10 points (rather than the typical 5 point assignment).