Introduction

Note. In the Introduction to Howard Eves' *An Introduction to the History of Mathematics*, 6th edition (Saunders, 1990), he emphasizes that this text is "an attempt to *introduce* the history of mathematics to undergraduate college mathematics students." He states that he believes a history of mathematics class should be a *mathematics* class and that students should learn both history and math.

Note. The departmental syllabus states that all 15 chapters of the book are to be covered. However, Eves himself states on page 3: "it is not easy to cover the history of mathematics from antiquity up through modern times in a one-semester course that meets three hours a week...." He describes the ideal situation as one in which the course is a two semester sequence, covering Part 1 (Chapters 1 through 8, and covering antiquity to the year 1600) in the first semester and covering Part 2 (Chapters 9 through 15, and covering 1600 to present) in the second semester. The first semester would be taken by prospective teachers of high-school mathematics. Since ETSU only offers one semester of History of Mathematics (MATH 3040) and it is required of math majors in the education concentration, then we will likely cover most of Part I and attempt to cover parts of Chapters 9 and 10 (the material before calculus)... maybe some of Chapter 11 too (the calculus chapter)...

Note. It's hard to choose the depth to which we will cover the topics. Eves does not go into much depth on many topics, and we will supplement his material with additional information. But this means that it will take us *even longer* to

get through all the topics! Likely, Eves book will act as an outline for the course and much of the material (in the form of online notes) will be from other well-documented sources. Details for any particular offering of the course will be given on course's syllabus.

Note. As motivation to undertake the topic of the history of math, we turn to an article by Torkil Heiede: Why Teach History of Mathematics?, *The Mathematical Gazette*, **76**(475) [a special issue on: The use of the History of Mathematics in the Teaching of Mathematics], 151–157 (1992). This article can be read in its entirety on the JSTOR webpage. The whole special issue is also online on the JSTOR site (accessed 10/28/2023). Heiede states:

> "If you teach mathematics, you must also teach history of mathematics, for the history of a subject is part of the subject. If you are not aware that mathematics has a history, then you have not been taught mathematics—because you have then been cheated of an indispensable part of it. ... A consequence of all this is ... that teachers of mathematics should—in their initial training—have learnt about the history of mathematics, either as part of the mathematics they have studied, or maybe preferably also in special courses in the history of mathematics, just as they may possibly have studied other parts of mathematics in special courses."

That's why we are here...