

Assessment 6

History of Mathematics Slideshow

Working in pairs, you are to develop a slideshow of famous mathematicians. The slide show should include at least one mathematician from the following areas:

- Number Theory
- Algebra
- Geometry
- Calculus
- Discrete Mathematics
- Statistics

For each mathematician, you will need to provide the following information:

- General biographic information about the mathematician
- Description of the mathematics that made the mathematician famous
- An illustration of the mathematical work
- Description of the political and social events of the time and an explanation of how these events impacted the mathematician

The slideshow should conclude with an explanation of how you would include the history of mathematics into a course/grade level for which you might teach.

National Council Teachers of Mathematics - (NCTM) Standards Addressed in this Activity:

Standard 9: Knowledge of Number and Operation

9.10 – Demonstrate the knowledge of the historical development of number and numbers systems including the contributions from diverse cultures.

Standard 10: Knowledge of Different Perspectives of Algebra

10.6 - Demonstrate the knowledge of the historical development of algebra including the contributions from diverse cultures.

Standard 11: Knowledge of Geometries

11.8 - Demonstrate the knowledge of the historical development of Euclidean and non-Euclidean geometries including the contributions from diverse cultures.

Standard 12: Knowledge of Calculus

12.5 - Demonstrate the knowledge of the historical development of calculus including the contributions from diverse cultures.

Standard 13: Knowledge of Discrete Mathematics

13.4 - Demonstrate the knowledge of the historical development of discrete mathematics including the contributions from diverse cultures.

Standard 14: Knowledge of Data Analysis, Statistics, and Probability

14.8 - Demonstrate the knowledge of the historical development of statistics and probability including the contributions from diverse cultures.

Rubric for Evaluation of the History of Mathematics Slideshow

*Your grade will be the highest level for which you meet all the criteria.

- A =** Slideshow includes all six content areas; Both men and women of importance are included
Biography of the mathematician is extensive;
- Description of the mathematics and the illustration is well-developed so that someone unfamiliar with the mathematician would understand his/her contribution to mathematics;
 - Description of the political and social events clearly describes the world the mathematician lived in;
 - Description of how the *history of mathematics* would be included in future teaching is well-developed, clear and specific;
 - *Slide Show is well organized, contains relevant content, and is easy to read (text appropriate size and quantity; background and colors enhance the readability of text; graphics enhance the understanding of the content and are the proper size and resolution)*
- B =** Slideshow includes all six content areas; Both men and women are included; Biography of the mathematician is complete;
- Description of the mathematics and the illustration is complete if someone has prior knowledge of the mathematician;
 - Description of the political and social events describes the world the mathematician lived in;
 - Description of how the *history of mathematics* would be included in future teaching is clear and specific
 - *Slide Show is well organized, contains relevant content, and is easy to read (text appropriate size and quantity; background and colors enhance the readability of text; graphics enhance the understanding of the content and are the proper size and resolution)*
- C =** Slideshow includes five of six content areas; only one gender is included; Biography of the mathematician is complete;
- Lists the mathematics and provides an illustration with little description
 - Lists the political and social events of the world the mathematician lived in, many aspects are left unexplained;
 - Description of how the *history of mathematics* would be included in future teaching is not connected to future teaching;
 - *Slide Show is organized, and contains relevant content; some slides (no more than 2) are distracting due to inappropriate text size, backgrounds/colors or graphics' sizes and resolution.*
- D =** Two or more content areas are missing.
- F =** Slideshow is late or missing.

Be prepared to present your slideshow to your peers. In addition, be prepared to turn in a copy of the slideshow for evaluation.