MTH 362 Reading assignment

You will read several (at least 5) expository articles related to given topics and write a brief reflection on what you read. For each topic, there are some suggestions on what articles to read, but feel free to research the topics and read more than suggested. If you are reflecting on an article not listed below, make sure to include all necessary information to identify the article (authors, title, journal…). Please keep in mind that it is your reflection on reading, not a thorough review or the articles - your reflection *does not have to be extensive*. A page covering each topic is fine, but feel free add more if needed. An evidence that you have read the articles and understood their major ideas is a key assessment criterion.

If you are submitting an electronic copy of your paper (e-mail is fine), name the file in the format **YourLastName_RA** . For example, a student Samantha Smith would send a file named "Smith_RA" (AR stands for Reading Assignment). Feel free to ask any questions you might have about the assignment. In the subject of your message, clearly indicate that it is a **Reading Assignment Submission.**

Review Topic 1: Van Hiele model of learning geometry.

The Van Hiele theory has had a tremendous impact on how we look at the development of geometric thought. You will read two expository articles:

- The Van Hiele Model of the Development of Geometric Thought by Mary Crowley. Article in NCTM 1987 Yearbook: Learning and teaching geometry, K-12 : 1987 yearbook / Mary Montgomery Lindquist, 1987 yearbook editor.

  The yearbook is available at Park Library, book collection, 4th floor. A scanned copy of this article will also be posted to the Bb.

- Rethinking proof – Van Hiele theory by Michael de Villiers. A scanned copy will be posted to the Bb.

Read the articles and respond to the following questions:

1. Describe briefly the main idea of the articles.
2. Were they worth reading? Briefly explain why or why not.
3. What ideas did you find interesting or important? Were there any particular ideas that you might be drawing on in your teaching? Any ideas directly transferable to a secondary classroom?

Review Topic 2: Proofs, hierarchies and dynamic geometry systems.

- Rethinking Proof – The Role and Function of Proof by Michael de Villiers. A scanned copy will be posted to the Bb.
- Some Pitfalls of Dynamic Geometry Systems by Michael de Villiers. Article is available on the internet (Search by the title and let me know if you cannot find it.)

Read the articles and respond to the following questions for each article:

1. In your own words, briefly describe the main idea of the article.

2. Was the article worth reading? Briefly explain why or why not.
3. What specific ideas did you find interesting or important? Were there any particular ideas that you might be drawing on in your teaching? Any ideas directly transferable to a secondary classroom?

Review Topic 3: Topic of your choice. (Of course related to geometry and/or its teaching and learning).

Again, make sure to address the following:

- What is the main idea of the article? Try to describe it in a few sentences.
- Was it worth reading? Briefly explain why or why not.
- What ideas did you find interesting or important? Were there any particular ideas that you might be drawing on in your teaching? Any ideas directly transferable to a secondary classroom?