Algebra 2

Ms. Milner

Polynomial and Polynomial Functions: WebQuest

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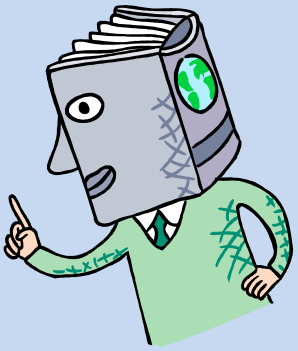
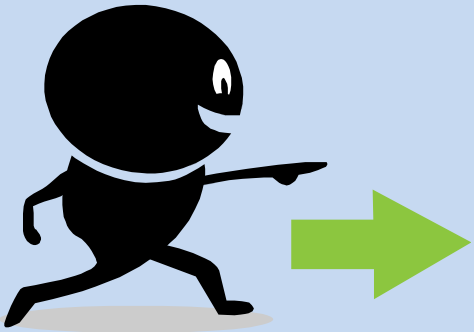
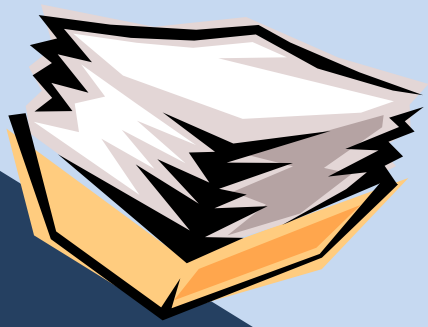
Introduction



Polynomials are functions that take time and consideration to learn and understand. This WebQuest will help you to understand the root of polynomial function. It will also help you to learn how to solve and graph polynomials.



Task



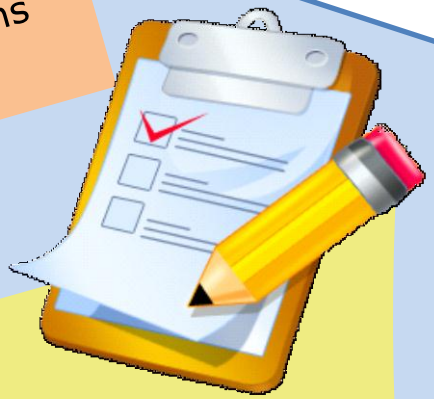
1. In this WebQuest you will work in groups of three to design a multi-function graph using the polynomials we have been working with.

2. By doing some online research, you much find three facts about the history of polynomials.

3. Finally you and your team will present your research and graph to the class.

Process

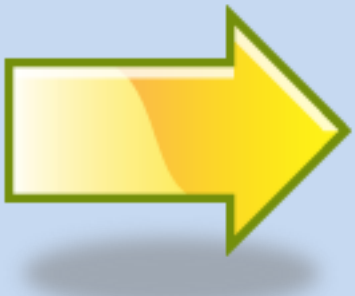
The following checklist will help guide you through the process of this WebQuest. These are your directions: follow all of the steps in order and see Ms. Milner whenever you have a question, comment, or whenever the directions say to do so.

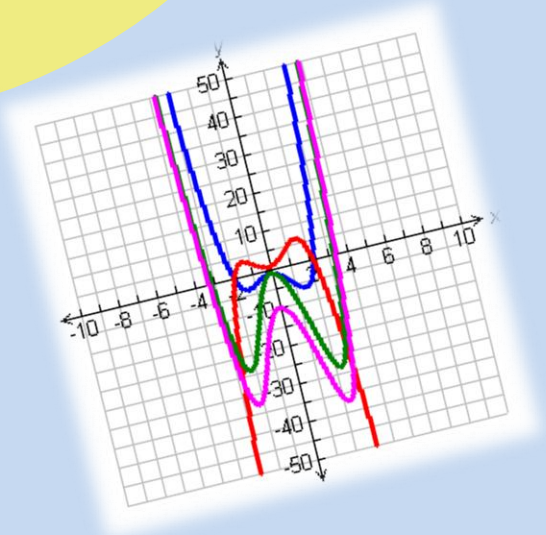


□ 1. Go to Ms. Milner to receive your group list (yes I will be choosing the groups) and polynomial worksheet that you will graph.

□ 2. Discuss, with your group, the task at hand. This is your planning process. Make sure you plan how you are going to present and show your presentation. Each student will need to talk during the presentation; as well as work out one of the problems on the worksheets you were given.

□ 3. Next, as a group solve and graph the polynomials on the worksheet you received. After you solve and graph you will need to graph all three polynomials and color coordinate them on the same plane like the picture below. This is a chance for you to be creative. Decorate the graph and make it appealing because this will be a part of what you will present.





□ 4. It's research time! Get with your group and research polynomial history. This link is being included to help you get started. Important! Make sure you get your topic APPROVED by me before you present. Remember that in order for your group to get full credit for this assignment each person must speak during the presentation.

□ 5. After you do research your group will need to plan your presentation. Make bulletin points on another poster board to demonstrate your presentation. Follow these guidelines for the presentation:

- Everyone must present.
- Keep the presentation under 20 minutes.
- Involve your audience.
- Be ready to answer questions.
- Understand your topic; make sure you are not just reading from your poster board.
- Somewhere during your presentations you will need to solve and graph your polynomials in front of your audience.
- Keep it clean. No profanity, this is an important grade so be serious about it.

□ 6. Finally, polish your work. Once you have everything ready to present make sure you understand and fix any problems that it may have. This is your final task before you present so use this time wisely. Do a self-presentation if you want. Feel comfortable and confident about what you are presenting. I look forward to hear every presentation.

Evaluation

This rubric shows you how this WebQuest will be graded.

	No Credit 0 pts.	Needs Improvement 1-3 pts.	Good 4-6 pts.	Well done 7-9 pts.	Excellent! 10 pts.	Score
Following directions	The group does not follow directions	The group follows some of the directions	The group follows directions in the right order.	The group follows all the directions and gets my approval on their topic choice.	The group follows the directions of each step, gets approval on topic, and understands what is expected and meets those expectations.	
Graph	The group has no graph	The group has a graph with more than 3 mistakes on it.	The group has a graph with only 2 mistakes on it.	The group has a graph with only 1 mistake on it.	The group has a graph with no mistakes.	
Presentation	The group does not present.	Only one person in the group presents.	Only 2 people in the group presents.	The group presents does not fully comprehend what they are presenting.	The group presents and understands what they are presenting. Answers questions with ease and does not just read from a slide.	
Class Involvement	The group does not involve the class.	The group somewhat involves the class.	The group involves the class by asking questions or for volunteers.	The group involves the class by a small quiz after their presentation.	The group involves the class by using a classroom discussion. The group also keeps the class entertained.	
Solving Polynomials	The group does not solve polynomials .	Only one person in the group solves a polynomial.	Only 2 people in the group solve a polynomial.	All 3 people solve polynomials with few mistakes.	All 3 people solve polynomials with no mistakes.	

Conclusion

I hope that this WebQuest has helped you understand our lesson in polynomials better. Becoming more involved in your learning is something that every student should accomplish while in my Algebra class. Enjoy your weekend!

Teacher Page

This WebQuest is designed to help students graph polynomial functions. The following is the list of benchmarks that go along with this WebQuest.

- MA.912.A.4.1-Simplify monomials and monomial expressions using the laws of integral exponents.
- MA.912.A.4.2-Add, subtract, and multiply polynomials.
- MA.912.A.4.3-Factor polynomial expressions.

Here is a website that was used in designing this WedQuest.

http://mathstudioweb.uccollegeprep.org/UCCollegePrep/MathStudio/Projects/A2_Unit3_Project.pdf

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