

ALGEBRA I EXTRA CREDIT ASSIGNMENT

Choose one of the tasks below. The final product is due by **Friday 10/31**. Each six weeks you may choose a different product to complete for extra credit. See attached rubrics for scoring guidelines. WORTH ONE QUIZ GRADE!

PROJECTS OVERVIEW

Trading Cards	Choose 4 mathematicians and create trading cards for each. Research biographical information on each one. Use 3 x 5 index cards to make a trading card for each of the mathematicians you choose. The front of the card contains Mathematician name, mathematician's picture, your own personal logo. The back of the card contains Mathematician name, date of birth, Place of birth (city, state, country), date of death (if deceased) contribution to mathematics, and explain how contribution affects your life
Brochure	Create a 3-fold (6 columns) brochure. All text must be typed. The brochure must contain <ol style="list-style-type: none"> 1. A title and a picture of a famous mathematician. 2. Information about his/her birth (date, locations, parents) and death if deceased 3. Information about his/her early childhood and family, places lived 4. Information about his/her education 5. A description of contributions to the field of mathematics 6. A timeline of where your person fits in history-what events were taking place during his/her lifetime 7. Quotations by or about your mathematician Remember to document your resources. You must use at least 2 resources.
Poster Board	Make a bulletin board using poster board. Some examples would be collage of all the uses of Math in Everyday Life, a bulletin board of Famous Mathematicians, or a bulletin board How Math is Used in Sports. *Get your topic approved by Ms. K before beginning*
Math Puzzle	Make a math puzzle. Examples include but are not limited to number search, cross-number puzzle, crossword puzzle using mathematical terms, word search using mathematical terms. You should have at least 25 problems in each puzzle. You must include an answer key.
Research Paper	Research a famous mathematician, mathematical concepts, or any mathematical idea. Then write a research paper of a minimum of 200 words. You must cite at least two sources and the research paper must be typed. *Get your topic approved by Ms. K before beginning*

Trading Cards

Task: You will...

- Choose 4 mathematicians and create a trading card for each one.
- Research biographical information on each one.
- Use a 3 x 5 index cards to make a trading card for each of the mathematicians you choose.

The card will should have the following:

- The front of the card should contain...
 - The mathematician's name
 - The mathematician's picture
 - Your own personal logo for that mathematician
- The back of the card should contain...
 - The mathematician's date of birth
 - The mathematician's place of birth (city, state, country)
 - The mathematician's date of death (if deceased)
 - The mathematician's contribution to mathematics
 - An explanation of how this contribution affects your life.

Resources

- You must cite where all of your information came from and include that in your trading cards
- You may NOT use Wikipedia as your resource

Rubric:

	Requirements	Details	Points Possible
Front of Card	<ul style="list-style-type: none"> • Name • Picture • Personal Logo 	<ul style="list-style-type: none"> ✓ Accurate full name ✓ Accurate picture ✓ Detailed and unique logo that connects to the mathematician 	_____/5
Back of Card	<ul style="list-style-type: none"> • Date of Birth and Death 	<ul style="list-style-type: none"> ✓ Accurate date of birth and death 	_____/5
	<ul style="list-style-type: none"> • Place of Birth 	<ul style="list-style-type: none"> ✓ Accurate place or birth 	_____/5
	<ul style="list-style-type: none"> • Contribution to Mathematics 	<ul style="list-style-type: none"> ✓ Detailed and accurate description of contribution 	_____/5
Resources	<ul style="list-style-type: none"> • Explanation of Effect on YOUR Life 	<ul style="list-style-type: none"> ✓ Detailed and thoughtful explanation of how the mathematician's works have effected YOUR life 	_____/5
	<ul style="list-style-type: none"> • Information is appropriately cited 	<ul style="list-style-type: none"> ✓ Resource used for any direct quotes or paraphrasing is included on each card 	_____/3
Creativity and Neatness	<ul style="list-style-type: none"> • Unique and neat completion of all parts 	<ul style="list-style-type: none"> ✓ Colorful picture and logo ✓ All sentences, phrases, etc. must be easy to read 	_____/2
Total			_____/25

You will be graded on this rubric for each trading card you create. Your final grade will be scored out of 100.

Brochure

Task: You will...

- Create a 3-fold (6 columns) brochure. It may be written or typed. If it is written, it must be extremely neat and easy to read.

The brochure must contain the following:

- A title and a picture of a famous mathematician
- Information about his/her birth (date, location, parents) and death if deceased
- Information about his/her early childhood and family, places lived
- Information about his/her education
- A description of contributions to the field of mathematics
- A timeline of where you person fits in history – what events were taking place during his/her lifetime
- Quotations by or about your mathematician

Resources

- You must cite where all of your information came from and include that in your brochure
- You may NOT use Wikipedia as your resource

Rubric:

	Requirements	Points Possible
Title and picture	<ul style="list-style-type: none">• Informative title of brochure• Accurate picture of mathematician	_____/10
Information about birth and death	<ul style="list-style-type: none">• Date of Birth and Death• Place of Birth• Information on parents• Similar information if deceased	_____/15
Information about early childhood	<ul style="list-style-type: none">• Siblings• Places lived• Important events	_____/15
Information about education	<ul style="list-style-type: none">• Schooling received• Impact of school on mathematician	_____/15
Contributions	<ul style="list-style-type: none">• Why is this mathematician famous?• What did they contribute to math?	_____/15
Timeline	<ul style="list-style-type: none">• Important events in the mathematician's life• Important historical events that happened around the same time	_____/15
Quotations	<ul style="list-style-type: none">• At least one quotation by or about the mathematician	_____/5
Resources	<ul style="list-style-type: none">• Information is appropriately cited	_____/5
Creativity and Neatness	<ul style="list-style-type: none">• Unique and neat completion of all parts	_____/5
Total		_____/100

Bulletin Board

Task: You will...

- Create a bulletin board using poster board regarding mathematics somehow. You have freedom here to choose what your bulletin board covers. Some possible topics include: "The Uses of Math in Everyday Life", "Famous Mathematicians", "How Math is Used in Sports", etc.

The bulletin board must contain the following:

- A main title
- At least 5 items or examples that relate to or explain your topic
- Each example must be titled
- A picture that goes with each example
- A short description as to how this example relates to the topic
- An overall description of how all of these examples somehow affect YOUR life

Resources

- You must cite where all of your information came from and include that in your bulletin board
- You may NOT use Wikipedia as your resource

Rubrics:

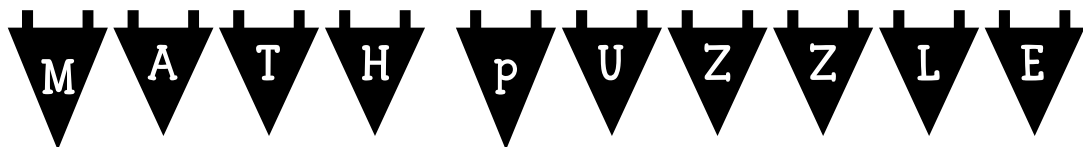
Rubric for the Overall Bulletin Board Pieces:

	Requirements	Points Possible
Main title	<ul style="list-style-type: none"> • Title is eye-catching • Title lets the reader easily understand what the bulletin board is about 	_____/5
Overall description of how the examples affect YOUR life	<ul style="list-style-type: none"> • At least 5 sentences • Thoughtful sentences about how your topics and examples affect YOUR life 	_____/15
Resources	<ul style="list-style-type: none"> • Information is appropriately cited 	_____/5
Creativity and Neatness	<ul style="list-style-type: none"> • Unique and neat completion of all parts 	_____/5
Total		_____/30

Rubric for Each Example:

	Requirements	Points Possible
Title & Picture	<ul style="list-style-type: none"> • Title is informative • Picture relates to example 	_____/5
Description	<ul style="list-style-type: none"> • At least 3 sentences • Informative and easy to understand explanation of how the given example relates to the overall topic 	_____/9
Total		_____/14

You will be graded on this rubric for each example you include.



Task: You will...

- Create 2 mathematical puzzles. Some examples include, but are not limited to: number search, cross-number puzzle, crossword puzzle using mathematical terms, word search using mathematical terms, etc. **Each puzzle should be a different type of puzzle.**

The puzzles must contain the following:

- A title for each puzzle
- Instructions as to how to complete the given puzzle
- At least 25 problems
- An answer key
- Work as to how your answer key relates to your problems
- Explanation as to why you chose to create that type of puzzle

Rubric:

	Requirements	Points Possible
Title	<ul style="list-style-type: none"> • Eye-catching title 	_____/3
Instructions	<ul style="list-style-type: none"> • Instructions are informative • Instructions are easy to read • Instructions are easy to follow 	_____/8
Twenty Five Problems	<ul style="list-style-type: none"> • Problems are challenging • Problems are written mathematically correct 	_____/12
Answer Key	<ul style="list-style-type: none"> • Correct work shown for each answer • Each answer is correct 	_____/16
Explanation	<ul style="list-style-type: none"> • At least 3 sentences • Thoughtful sentences as to why you chose to create these types of puzzles 	_____/8
Creativity and Neatness	<ul style="list-style-type: none"> • Unique and neat completion of all parts 	_____/3
Total		_____/50

You will be graded on this rubric for each puzzle you create. Your final grade will be scored out of 100.

RESEARCH PAPER

Task: You will...

- Complete a TYPED 200 word research paper. You may choose the topic you research. Some examples include but are not limited to research on a famous mathematician, mathematical concepts, or any mathematical idea.

The research paper must contain the following:

- A title
- Minimum of 200 words
- Introductory paragraph – outlines what you chose for your research topic
- Three body paragraphs – each paragraph covers a topic that supports your main topic
- Closing paragraph
- At least two resources
- It must all be typed

Resources

- You must cite where all of your information came from and include that in your research paper
- You may NOT use Wikipedia as your resource

Rubric:

	Requirements	Points Possible
Title	<ul style="list-style-type: none"> • Eye-catching and informative title 	_____/5
Typed 200 Words	<ul style="list-style-type: none"> • All 200 words are typed 	_____/5
Introductory Paragraph	<ul style="list-style-type: none"> • At least 3 sentences • Describes what you chose to research • Outlines what you are going to cover in the body paragraphs 	_____/15
Body Paragraph #1	<ul style="list-style-type: none"> • At least 4 sentences • Is connected to the main research topic 	_____/15
Body Paragraph #2	<ul style="list-style-type: none"> • At least 4 sentences • Is connected to the main research topic 	_____/15
Body Paragraph #3	<ul style="list-style-type: none"> • At least 4 sentences • Is connected to the main research topic 	_____/15
Closing Paragraph	<ul style="list-style-type: none"> • Wraps up how the body paragraphs connect to the research topic • Covers how the research topic has an effect on YOUR life 	_____/15
Resources	<ul style="list-style-type: none"> • Information is appropriately cited • At least two resources are used 	_____/5
Paper Quality	<ul style="list-style-type: none"> • Paragraphs are smoothly connected • Effort put forth to minimize repetitive words • Minimum grammatical and spelling errors 	_____/10
Total		_____/100

