

## 2009 ISA summer assignment for Algebra I and Geometry Pre-AP

Algebra II students, please see the ISA website ( <http://www.neisd.net/isa>) and complete the sophomore Algebra II summer assignment.

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Welcome to ISA! Before you embark on what will certainly be an adventurous year in mathematics and all other subjects, you need to do a little bit of work to open up your brain to new ideas! Your math class will require you to think in different ways, see things from new perspectives, and challenge your beliefs. It will also require you to learn the intricate details of how to work through mathematical processes, but we'll get to that later. Right now, enjoy these short projects!

**These are all due on the first day of class! Please have them completed to get your year started right. They will take a little while, so be sure to space them out over the summer. Don't wait until the day before school starts!**

1. What in the world is a Mathematician, anyway? What does one do? What does one look like? What does one use every day? Can anyone be a mathematician?

*Draw a picture of what you think mathematician looks like, and write a paragraph explaining your artwork.*

Your picture doesn't have to be museum-quality (unless you want it to be!) but you should put a good amount of effort into it. You should use colors, and your picture should be at least the size of a sheet of notebook paper (8½ by 11 inches). Your paragraph should contain at least 5 sentences.

2. What makes math worth doing? I'm sure you've asked your teacher the question "when are we every going to use this?" at some point. That's a very good question, and one that we'll talk lots about this year. For now...

***Write at least 1 page, typed, double-spaced, on one of the following:***

- a. *Describe a situation in your life in which you used math in something other than math or science class. Where did you learn the math that you used? How did it help you in your task? How could you have used math to make your situation even better?*
- b. *Describe a math problem or concept that you found particularly interesting. It could be either from school, or from your own interests. How did you discover it? What did you do to research it? What conclusions did you come to? What questions did you have at the end?*
- c. *Find a famous mathematician that sounds interesting to you. Where are they from? What did they study? How did they contribute to mathematics? What are they famous for?*

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