

GED Math And You Inquiry Activity #1:

Explore Your Experiences with Math

(Note: The italicized portions should be directed to students)

1. Identifying the Problem

This activity is started after the class has taken the GED Math Practice Test. This portion of the activity is done individually.

The problem you will be exploring involves the following question:

What are some of the things you know about math, and what are some of the things you want to know? As in other Inquiry Activities, this first step asks that you not answer the question at once, but make sure you understand the questions being asked. If you want to discuss your understanding of the question with others, please do so.

2. Becoming Familiar with the Problem

This second step starts the process of thinking about what you already know about the subject. Take some notes on what you know about this question. To help you, consider the follow questions:

1. *Think about the experience you have just had in taking the GED Math Practice Test. Don't think about whether you got an answer right or wrong but focus on what kind of math was on the test*



and how you reacted to it. Make some notes on your recollections.

3. *Think back beyond the Math Practice Test you just took and recall the exercise you had in the "GED and You" Inquiry Activity when you just looked at the questions on the Math Practice Test.*
 - *What were your thoughts and reactions during that examination?*
 - *What math seemed familiar to you, and what kind of math was unfamiliar?*
 - *Think back to your school experience.*
 - *What math courses did you take?*
 - *What do you remember about the courses?*

3. Planning, Assigning and Performing Tasks Planning

This is an individual activity. You can think about how you will organize your thoughts and recollections to answer this question.

Assigning

Not applicable.

Performing Tasks

Doing the Work

Think a little more about the experiences you had in math in this GED class and at school. Write down the thoughts that go through your mind as you remember those experiences. Write down notes to the following questions:

*How do you feel when you think about math?
What are some of the things you know about math, and what are some of the things you want to know?
List below:*

Make a list of your answers divided into the following categories:

What I know about math.

What I want to know about math.

Reaching a Conclusion

Now form groups. Each group will do the following:

1. *From the lists that were developed individually by the group members, the group is to develop a list of math subjects that the group knows about.*
2. *Develop a list of the math subjects the group members don't know that much about.*
3. *Besides computational skills, what other aspects of math do you have questions about? List as many as possible.*



4. Discuss some of the emotional feelings you had when you thought about math in school.

The group should prepare its lists for presentation to the class and decide if it wants to discuss the emotional reactions the group members had to math at school.

4. Sharing with Others

Each group will present its lists to the rest of the class and be prepared to lead a class discussion if questions or comments are forthcoming.

The instructor will lead a discussion after the groups have made their presentations that references and pulls together some of the following items among all the groups:

- Class members' computational strengths in math;
- Class members' lists of other aspects of math that they are good at or would like to know more about;
- Lead a discussion on math anxiety if the learners bring the subject up. If there is a lot of discussion from the learners about math anxiety, then you might want to develop an Inquiry Activity that allows the learners to explore some of the written materials about math anxiety and share their research and observations with the rest of the class.

5. Reflecting, Extending and Evaluating

In this section, the questions are divided so learners can think about what they experienced, extend their learning experience to new and different contexts, and evaluate their learning. The kinds of questions used to accomplish this kind of thinking are the analytic, creative and practical questions discussed by Robert Sternberg, in his book, *Successful Intelligence*.

In general, creative and practical type questions are most useful in the Extending subsection. Analytical questions are most useful in the Reflecting and Evaluating subsections. Use your own questions in these areas that may come from your Just-in-Time assessment or comments made during the sharing portion of the Activity.

If you feel that the learners are sufficiently confident enough, they may lead this discussion. You as instructor are a member of the class and should participate in the discussion. This is a wonderful opportunity for Just-In-Time assessments.

Reflecting: Think about what you learned.

These questions tend to be analytical in Sternberg's *Successful Intelligence* model.

- What new discoveries have you made about GED math?
- What impact do you think your emotional reactions to math have when learning the subject?
- What impact do you think your emotional reactions to math have when taking a math test?

Extending: Extend what you learned to new situations.

These questions tend to be creative and practical in Sternberg's *Successful Intelligence* model.

- Think about how you feel in a course that you like.
- How do you feel in that course and how can you transfer that feeling to a course you may not like, like math?

Evaluating: Assess what you learned and how you learned it.

These questions tend to be analytical in Sternberg's *Successful Intelligence* model.

- If you have a negative reaction to math, what do you think it is that creates that reaction?
- How do you think you could overcome that reaction?
- How did this process work for you?
- What made it valuable for you?
- How might you improve this activity?