Math Q 114, Spring 2009   Assignments for Week of January 25-29.

1. Purchase Text and Read: Purchase *Explorations in College Algebra, Fourth Edition*
and:
a)   Read Exploration 1.1 at the end of Chapter 1, pp. 58-60.
b)   Read the following article by going to the textbook website at
http://www.wiley.com/college/kimeclark and choosing "Student Companion Site"
      Article to read: "U. S. Government Definitions of Census Terms" and "Health
      Measurements"

2) Email Assignment:
If you do not already have email at home or work, get an e-mail account from (see
instructions below).Send me a brief message before next Monday's class. My e-mail
address is: mark.pawlak@umb.edu Your message should contain your name, information
about where you're emailing me from-home, work, UMass, etc. and the days of the week
and times of day when you could meet me for extra help. This will assist me to schedule
office hours convenient to everyone in our class. For example:
        *Hi, Prof. My name is _____. I'm in your Quantitative Reasoning class. I'm
sending this email from work, where I have the use of a PC Computer. I hope I won't
need a lot of extra help, but if I should, I could meet you any day right after class at 1:00
PM; also Weds. at 2:00 and Tues./Thurs. At 11:00 AM.*

3) Obtain an Email Account:
*If you don't already have an e-mail address, you must get one. As a UMB student, you
are entitled to a free e-mail address. http://www.umb.edu/student_services/email.html for
more informationNote that the University uses your student e-mail address to send you
important UMB-related information. Even if you don't use that address regularly, you
may want to visit the webmail site and set up it up so that e-mail is forwarded to an
account you do use.*

4) Assigned problems:
a)   Complete the review problems in the "3 Types of Percents" for Wednesday,
January 27.
b)   Write your "automathography" (see attached explanation). Type your
automathography as a Microsoft Word document and submit it by email as an attachment
by Wednesday, January 27.
c)   Complete the Fast facts assignment for Friday, January 29.

5) Decide how you want to save documents produced in class.
We will be making different Excel and Word files in class, and you will want to save
them for use at home and in the labs at school. You can save files temporarily to the
"downloads folder" on the desktop on your computer, but you will need a more secure
place to store your information. There are three choices for how you will do this..
•   Purchase a "thumb drive". These are available at stores such as Office Max and
Staples. The cost ranges from $7 - $40 (with rebates). This is a small (approximately 2
inch) "stick" that can be plugged into a USB port on a computer. (but make sure you do
have a USB port).
•   Use the attachment feature of e-mail. This is a good choice if you have a fast e-
mail connection at home and you have plenty of space in the "inbox" that you use for e-
mail. You can attach documents produced in class and e-mail them to yourself for later
use.

Math Q114   Portfolio Requirement

Over the course of the semester you will be asked to compile a portfolio of work that you have produced in this class. The portfolio will be a record of what you have done in different aspects of this course and of the mathematical and quantitative reasoning skills you have mastered. You will be asked to write a reflection on your experience s in this course based on your portfolio. This reflection will be due on the day of the final exam and will be worth 5 points out of the 100 points on the final. The following items should be included in your portfolio:

> an automathography
> fast facts assignment
> one graded homework assignment of your choosing
> three examples of your written work
>> 1. A 60-second summary analysing a graph or data from a recent newspaper or magazine article
>> 2. The 60-second summary from your Extended Exploration (FAM 1000)
>> 3. Write-up of your a group presentation

Automathography Assignment

An authomathography is your "mathematical biography." Some of the things it may include are listed below. You can write about just one of the items in this list, but it's also OK to write about more than one. Be sure to type your automathography as a Microsoft Word document and submit it by email as an attachment by Friday, September 8.

> reflections on your best or worst math experience--or both
> a description of how you use math in your daily life or on your job
> how you feel about mathematics as a subject of study
> your confidence in your ability when called upon to do math

As an example, my own automathography follows:

Mark Pawlak's Automathography

With regards to my early mathematics education, no single teacher stands out in memory as being either particularly good or bad. Learning math just seemed to happen of its own, unnoticed. Each new math topic was served up to me in little morsels which weren't particularly appetizing, but which didn't taste badly either, and before I realized what was happening, I felt quite full--with the subtraction of three digit number, involving borrowing, or whatever the subject. I recall the chore it was to memorize multiplication tables in, I think, grade 3, but after that came the great satisfaction in having accomplished a difficult task. I can picture the index cards I studied from at home as well as the larger sized flash cards my teacher used in class.

My father used to help me to learn my times tables and he somehow made me feel it was within my grasp, something he felt sure I could do, and his confidence in me gave me confidence in myself, so that I wasn't intimidated at being put on the spot to recite from memory in front of my classmates. He also subtly convinced me that the task of making times table matrices could be fun and he made me appreciate the magical quality of their symmetry along a diagonal. It's curious to me now to realize that my father was able to communicate these important attitudes to me based solely upon the comfort he felt with numbers and calculations, since he wasn't particularly studious as a kid himself and never finished high school.

Perhaps the most important thing my father he did for me as a young learner,

quite unintentionally, I believe, was to teach me how to do long division before my teacher got to the subject in class. It appeared, at first, to be a complicated procedure, difficult to understand, intimidating. But my father, for some reason felt I was ready to learn it and so he patiently explained how it was done, then demonstrated with one example after another until I got it right. It's hard to communicate how empowered and special this made me feel. Not only had I mastered a difficult, new topic in math before any of my peers, but I now possessed a knowledge none of them shared. I felt that my classmates and teacher looked at me differently after that; whenever a question regarding math came up in classes, all eyes turned on me to answer it, which I did with confidence. After that, when we turned to a new chapter in our math textbooks, I never again became anxious that the topic might be too difficult for me to master, for I knew that I was 'good,' even 'talented' at math. The other important lesson I took from this experience, and for which I credit my father, was that not all learning takes place in the classroom under your teacher's direction; some things, perhaps many things, can be learned on one's own. The only requirements are that you have to want to learn the thing strongly enough and that you try hard.