

## Graphs: Assignment #1

This assignment has TWO PARTS. Each of these two parts counts as a homework. The hardest part is this: turn in the two parts separately. Each part should have the following information on it.

- Your name
- Your student ID number
- Which section you are in: 02 MWF, or 04 TTh

### Specifications for Grading

To earn a passing mark, your assignment must:

- be typed, and at least one page and no more than two pages in length.
- address the writing prompts below.
- conform to reasonable standards for grammar, spelling, and usage of the English language with minimal errors. (You may consider seeking help on writing from the Writing Center in the Academic Learning Center. <http://www.uni.edu/unialc/writing-center>)
- be turned in by 2pm on Friday, January 15.

### Part One

Please write a short *Mathematical Autobiography*. I think a single page should be enough.

I want to know something about your attitude towards mathematics, and your relationship with the subject. Feel free to address whatever you want to share. In case you are feeling at a loss for where to start, consider the following questions:

- Do you enjoy mathematics? Why or why not?
- Have you had a particularly good experience studying mathematics? If so, what made it work for you?
- Have you had a particularly negative experience with mathematics? If so, what made it so negative?
- How do you study? What do you do when you get stuck? What kinds of things feel like effective ways for you to learn math?
- What do you hope to get out of our class this term?

I don't expect you to cover each question. Rather, use these as a starting point for your thinking.

## Part Two

Make diagrams of all eleven of the distinct graphs which have exactly four vertices. The number of edges will vary, but the number of vertices for each example is equal to four.

Write a paragraph describing how you know there are only eleven such graphs, and how you know they are all different.