MATH 634, Spring 2014
Homework 7
due 5:00pm on Monday, February 24.

Background reading: Pearls in Graph Theory, Section 3.1.

Follow the posted homework guidelines when completing this assignment.

Problems **7D**, **7E**, and **7P** should be typed (or written up) and handed in as class starts on Monday 2/24:

7D.
- cycle decomposition of a graph
- (closed) knight's tour
- walk
- Eulerian circuit
- Sierpinski Graph of order n.

7E. Find a decomposition of the Grötzsch graph into the smallest possible number of paths. Give a justification why this is as small as possible.

7P. Determine the chromatic number and edge chromatic number of the Sierpinski Graph of order n. Prove your result by induction.