This problem set will not be collected, but will be covered on the exam.

On the website for this course, you will find a link to a picture of a roadside section of fence. Print several out for the following problems.

`http://acunix.wheatonma.edu/jsklensk/Art_Spring09/art.html`

1. (Exercise 1, Lesson 4, *Lessons in Mathematics and Art.*) Within the solid outline of the fence section, draw 7 equally spaced vertical fenceposts to create a fence with 8 equal sections.

2. Extend the fence into the distance by drawing three exact perspective duplicates of the original rectangular section, each attached to the far side of the previous.

3. (Exercise 2, Lesson 4, *Lessons in Mathematics and Art.*) Considering the solid outline to be one section of fence, draw another section of fence that is an exact duplicate of the original, with the top of its *near* fencepost at the point P.

   Note: I know P is close to where a diagonal through the midpoint of the side hits, but that's just coincidence, so don't use that; P could be anywhere along the top rail. Sometimes we want to draw an exact copy of a rectangle some random distance from the original. To help ensure that your fence is in the same plane as the original, extensions of the fence-top and fence-bottom have been provided.

4. (Exercise 3, Lesson 4, *Lessons in Mathematics and Art.*) Draw a duplicate of the section of fence (in the same plane as the original), with the top of its *far* fencepost at the point P.

   Note: Again, there is nothing special about where P is, it could be anywhere on the extension of the top fence rail. Your new rectangle may or may not overlap with the original section of fence. This is handy for drawing such things as a partially open sliding glass door or window, for instance.

5. (Exercise 4, Lesson 4, *Lessons in Mathematics and Art.*) Similar to #1, but this time, draw 2 vertical fenceposts to divide the fence into 3 equal sections. (Think outside the box!)