

Attached you will find several copies of a fence along the side of road. Use a different one for each exercise.

1. Within the solid outline of the fence, draw 3 vertical fenceposts to create a fence with 4 equal sections.
2. Extend the fence into the distance, by drawing three exact perspective duplicates of the rectangle, each attached to the far side of the previous.

These next several problems don't use anything more sophisticated than the ideas we've used in class to get our results (parallel lines, similar triangles, diagonals bisect each other, etc), but they also aren't just replicating what we've already done – they're coming up with new techniques. Brainstorm with your friends and neighbors, and enjoy

3. (This is Exercise 2 from Lesson 4 in *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: There 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 just want to draw exact an copy of a rectangle but want the new rectangle to be spaced apart 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. (This is Exercise 3 from Lesson 4 in *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 .

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. (This is exercise 4 from Lesson 4 in *Lessons in Mathematics and Art*.)
Draw 2 more fenceposts to divide the fence into 3 equal sections. (Think outside the box!)













