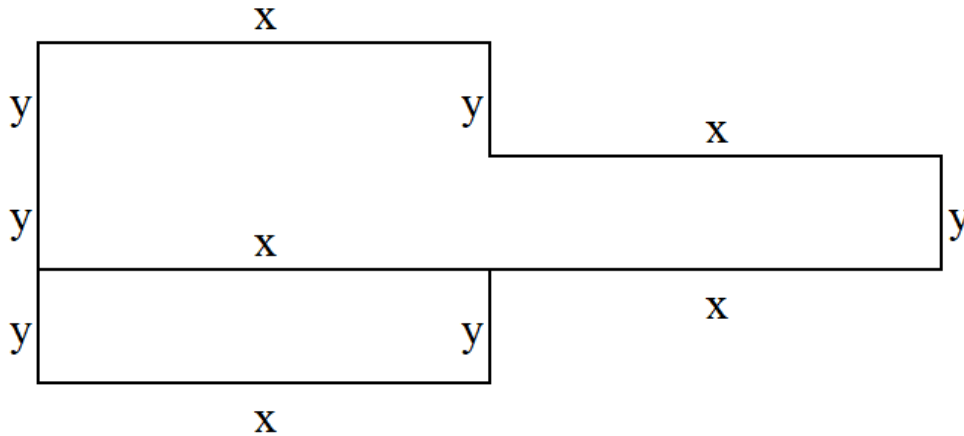


I. This time the builder wishes to arrange the enclosed region as indicated in the figure below. Suppose there are 90 meters of fencing available, and fencing is required for those segments indicated with a solid line.

1. What is the maximum possible area that can be enclosed?
2. What dimensions will achieve this?



II. As indicated in the figure below, a builder wishes to partially enclose an area using 224 feet of fencing. The segment indicated with a dotted line is a gate and does not require fencing, but the segments indicated with solid lines do require fencing.

1. What is the maximum possible area (the total area of the larger rectangle and the smaller square in the lower right) that can be enclosed?
2. What is the area of the smaller square?

