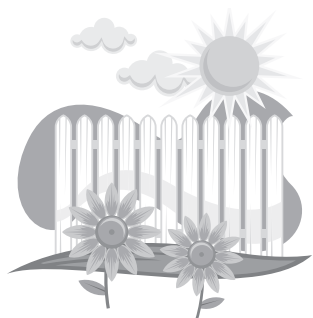


# The Vegetable Garden

## A Fixed Perimeter Investigation



You buy an 80-foot length of fencing on sale at the garden supply shop with which to enclose a rectangular vegetable garden. You have plenty of room for the garden, and want to enclose the largest area possible to plant your vegetables. Find the dimensions of the rectangle that would enclose the greatest area with the given length of fencing.

### EXTENSION

Suppose you enclose the garden with one side along the garage wall (leaving only 3 sides with fencing). Find the rectangular garden dimensions that would enclose the greatest area with the same length of fencing.