

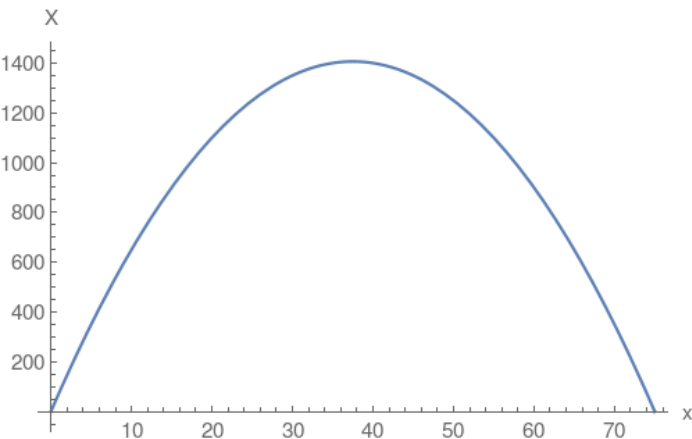
4.

4. Perimeter of rectangle = $2(x+a)=150$ where a is the length of the other edge of rectangle. Area of the rectangle is $= x \times a$.

Use perimeter equation

and solve for $a = \frac{150-2x}{2}$

Then reformulate the area $X = x \times a = 75x - x^2$ which turns out to be a quadratic Parabola:



Compute the vertex $\frac{150}{4}$ and then plug the vertex into the area which will compute the maximum area.