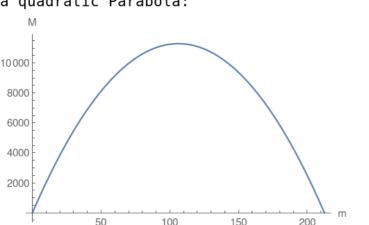
2.

2. Perimeter of rectangle = $2\,(m+a)=425$ where a is the length of the other edge of rectangle. Area of the rectangle is = $m\times a$. Use perimeter equation

and solve for $a=\frac{425-2m}{2}$ Then reformulate the area $M=m\times a=\frac{425\,m}{2}-m^2$ which turns out to be a quadratic Parabola:



Compute the vertex $\frac{425}{4}$ and then plug the vertex into the area which will compute the maximum area.