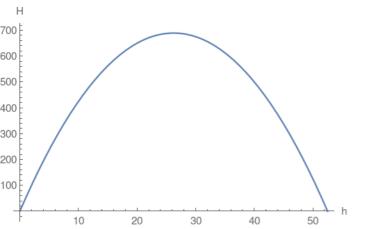
2.

2. Perimeter of rectangle = $2\,(h+a)\,{=}\,105$ where a is the length of the other edge of rectangle. Area of the rectangle is = $h{ imes}a$. Use perimeter equation

Then reformulate the area $H= h \times a = \frac{105 \, h}{2} - h^2$ which turns out to be a quadratic Parabola:

and solve for $a = \frac{105-2h}{2}$



Compute the vertex $\frac{105}{4}$ and then plug the vertex into the area which will compute the maximum area.