

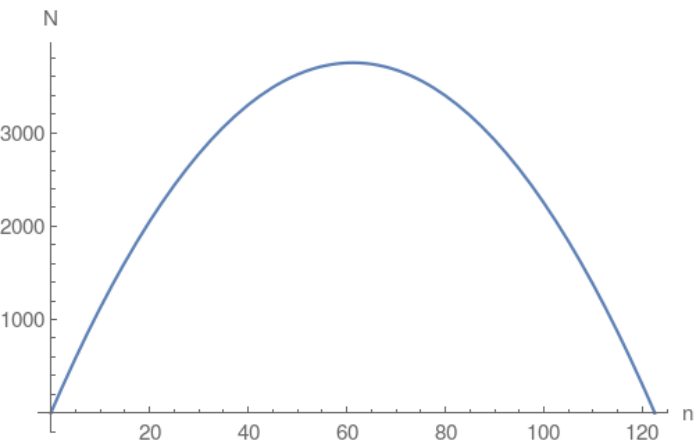
2.

2. Perimeter of rectangle =  $2(n+a)=245$  where  $a$  is the length of the other edge of rectangle. Area of the rectangle is  $= n \times a$ .

Use perimeter equation

and solve for  $a = \frac{245-2n}{2}$

Then reformulate the area  $N = n \times a = \frac{245n}{2} - n^2$  which turns out to be a quadratic Parabola:



Compute the vertex  $\frac{245}{4}$  and then plug the vertex into the area which will compute the maximum area.