2.

2. Since the fences enclose a rectangular plot without one side, two sides have length b and one side has length a:

$a+b+b=1728 \implies a=1728-2b$

the area:

$area=a \times b=(l-2b)\,b= 1728\,b - 2\,b^2$

Note that the function is for parabola. Now find the vertex:

vertex= $(432\text{ m} , 373248\text{ m}^2)$

Square the unit for vertex's vertical coordinate since it is a quadratic.