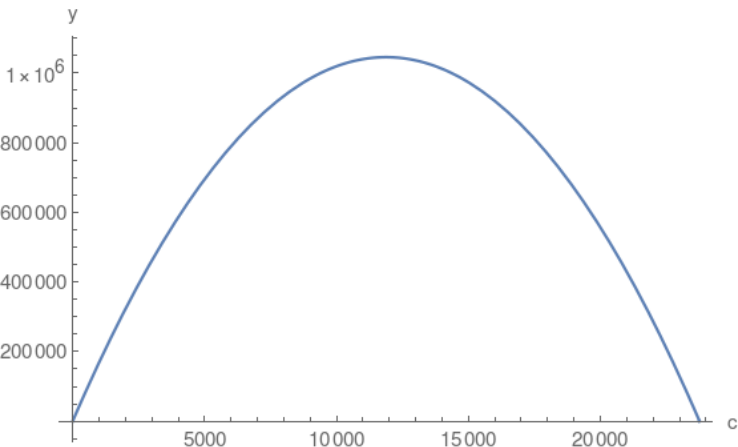


4.

4. (1) To compute the MIN/MAX, first calculate the vertex:

$$\text{vertex} = \frac{-176}{2 \frac{(-15)}{45^2}} = 11\,880$$



since the height  $y$  of the projectile is modeled by a Parabola formula.