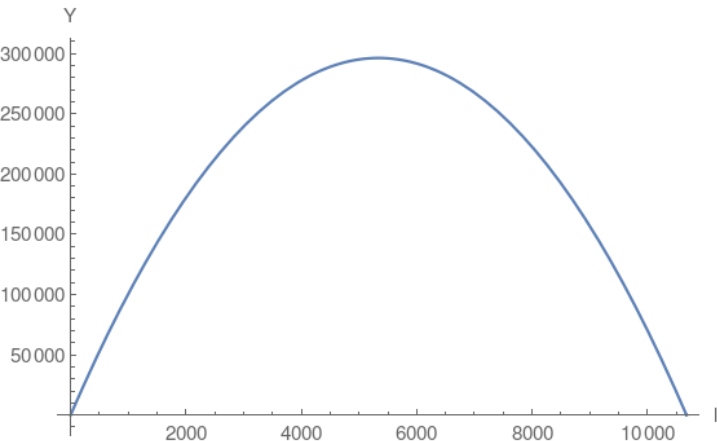


3.

3. (1) To solve for the MIN/MAX, first calculate the vertex:

$$\text{vertex} = \frac{-111}{2 \frac{(-22)}{46^2}} = \frac{58719}{11}$$



since the height Y of the projectile is governed by a Parabola equation.