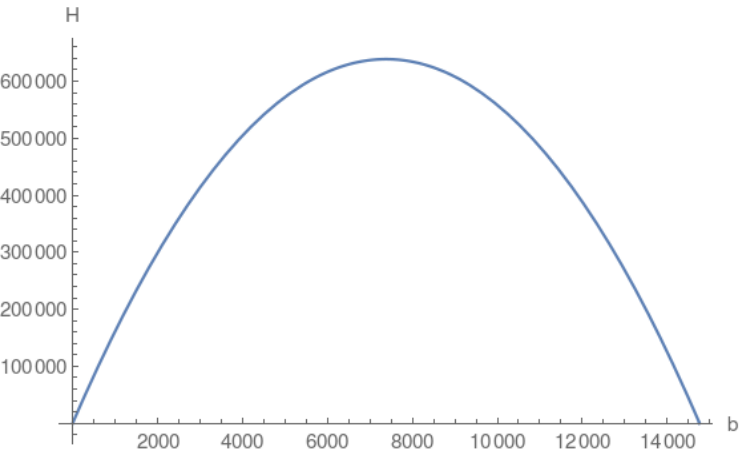


3.

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

$$\text{vertex} = \frac{-173}{2 \frac{(-12)}{32^2}} = \frac{22144}{3}$$



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