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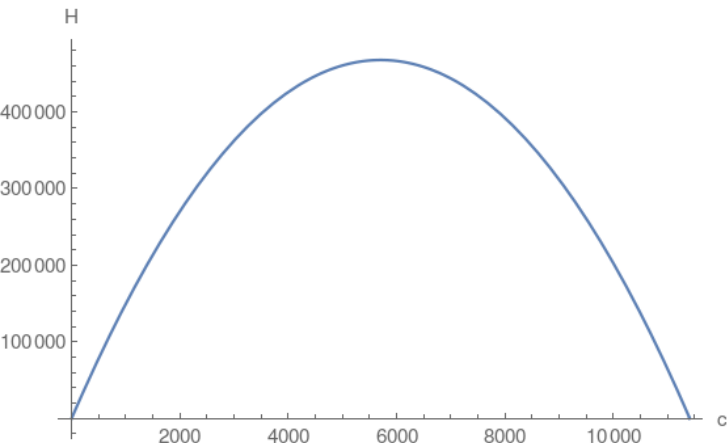
4. (A) To compute the MIN/MAX, first calculate the vertex:

$$\text{vertex} = \frac{-164}{2\frac{(-23)}{40^2}} = \frac{131200}{23}$$

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