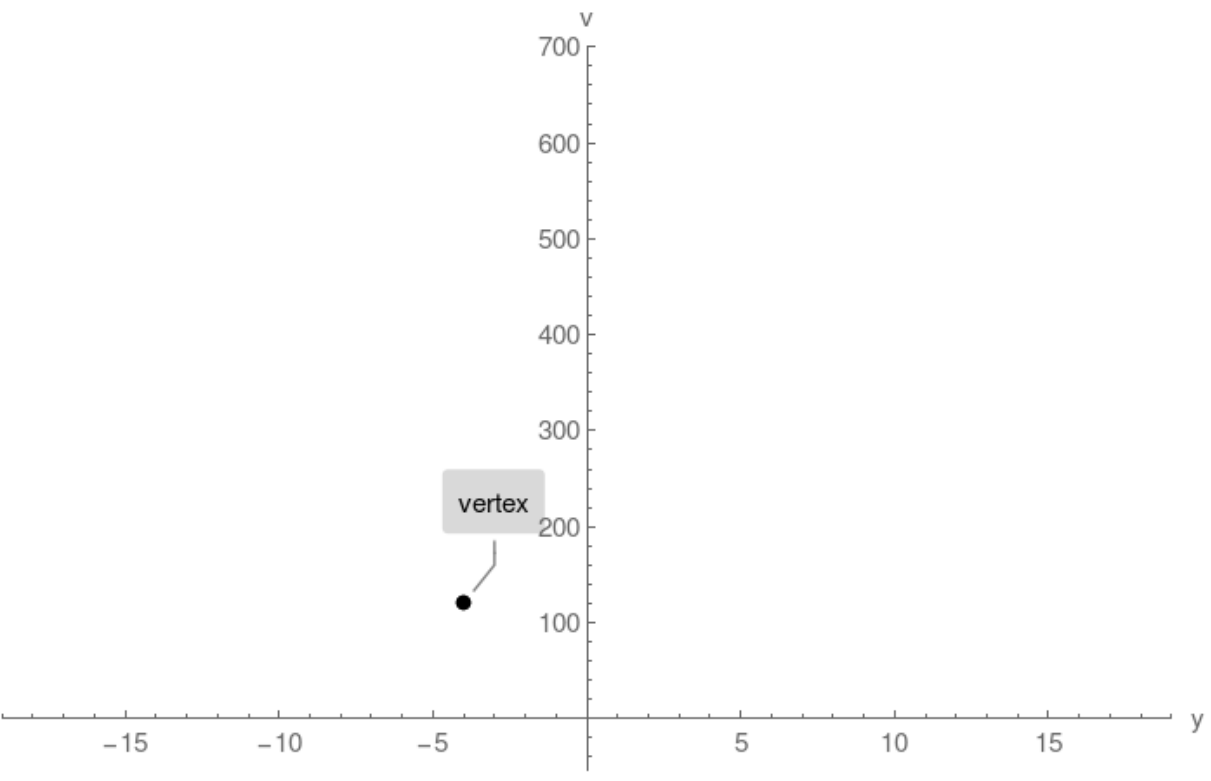
Example 2. No horizontal intercepts found

Plot $v(y) = y^2 + 8y + 136$

Step 1.

Compute vertex and plot single point:

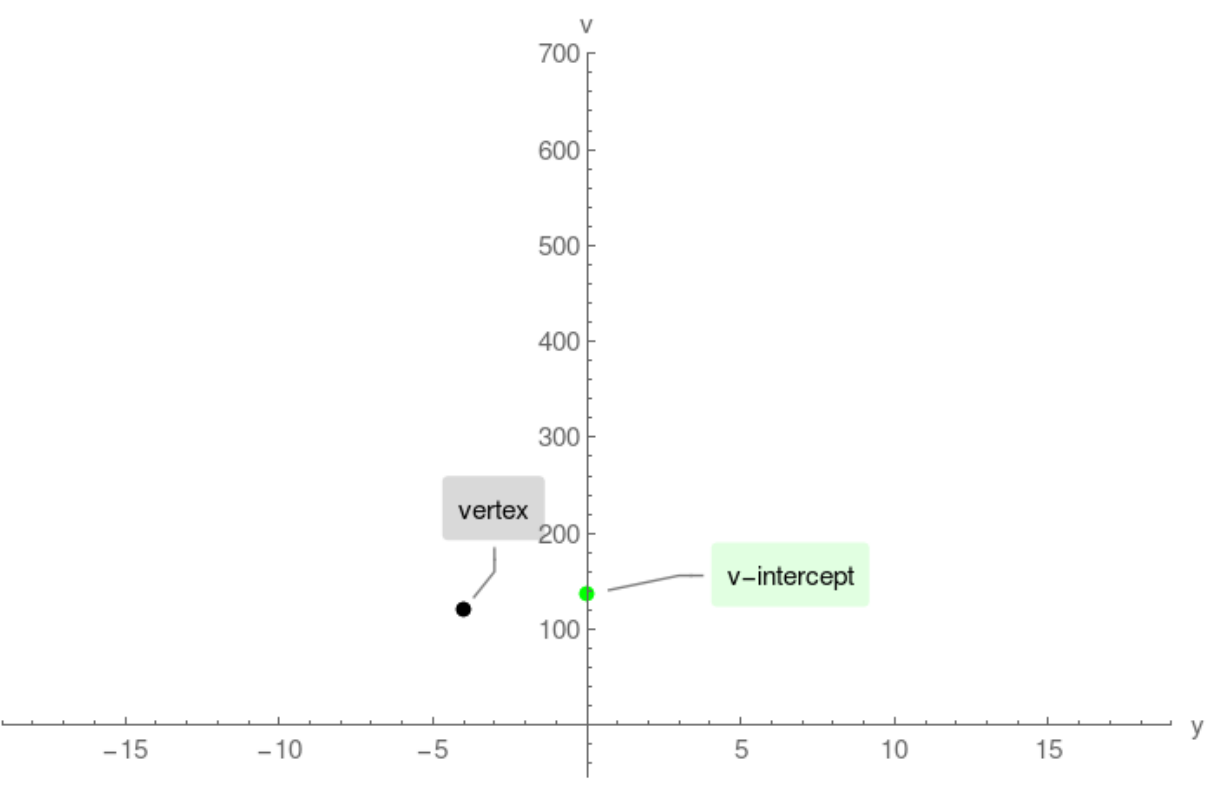
vertex $= (-4, 120)$



Step 2.

Compute v-intercept and plot single point:

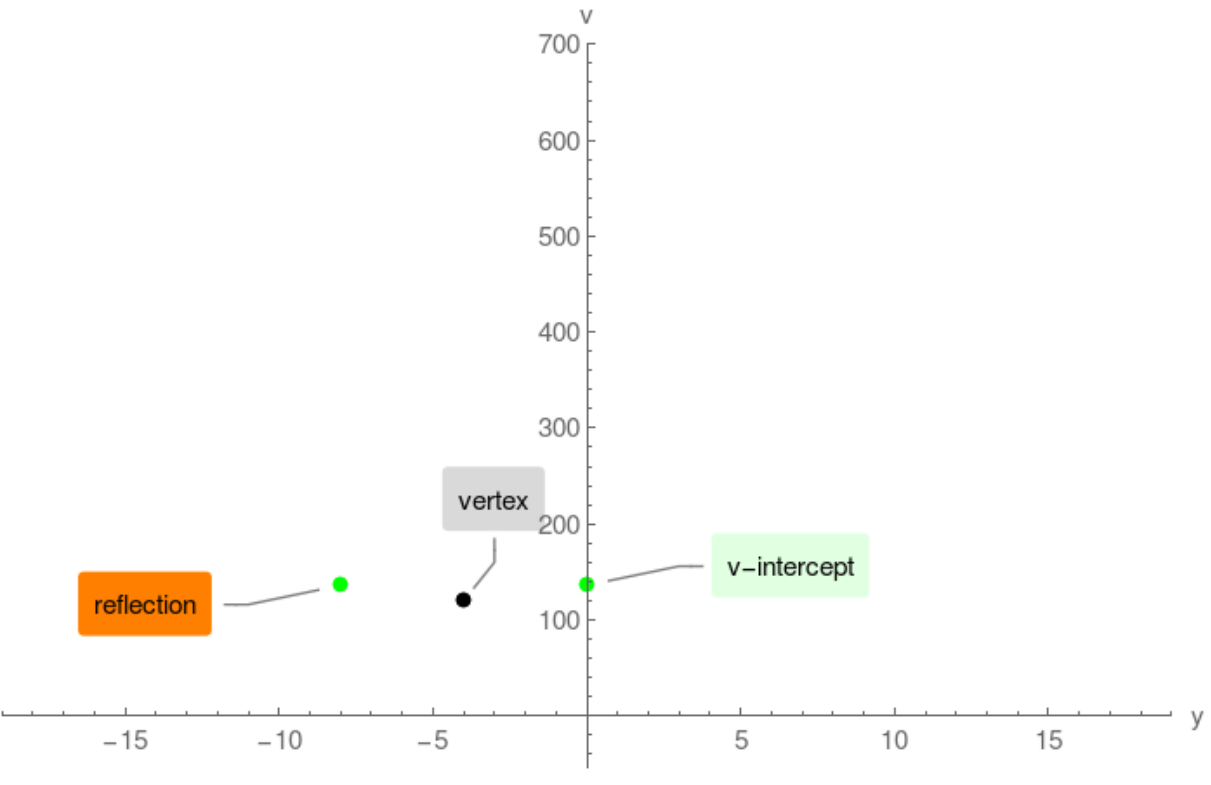
v-intercept $= (0, 136)$



Step 3.

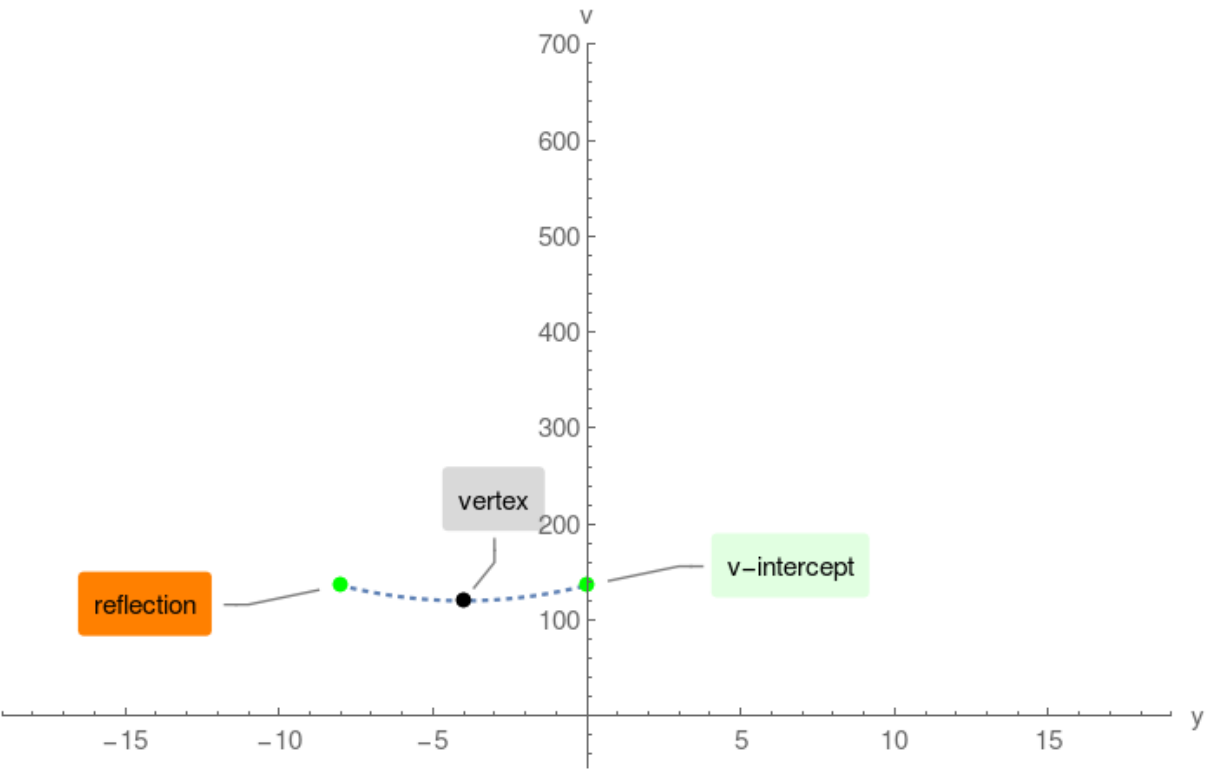
Compute v-intercept reflected against vertex,

reflection $= (-8, 136)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts