

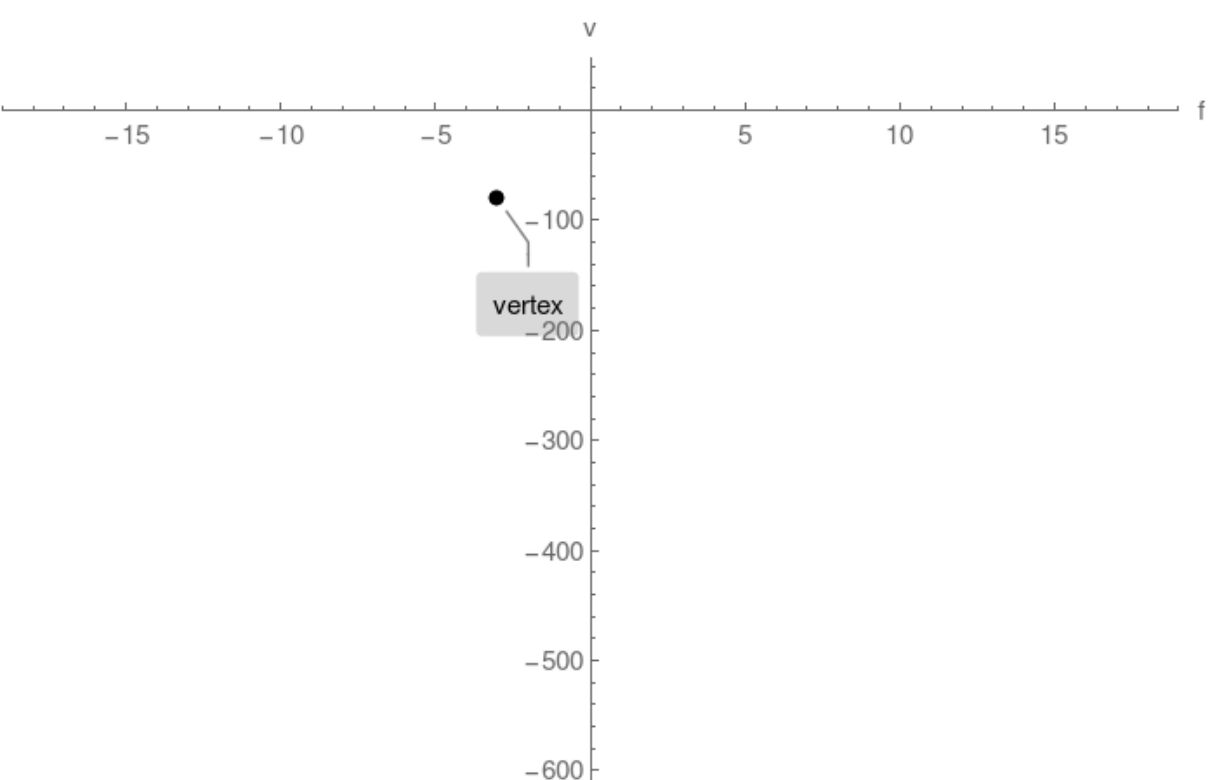
Example 2. No horizontal intercepts found

Plot $v(f) = -f^2 - 6f - 89$

Step 1.

Compute vertex and plot single point:

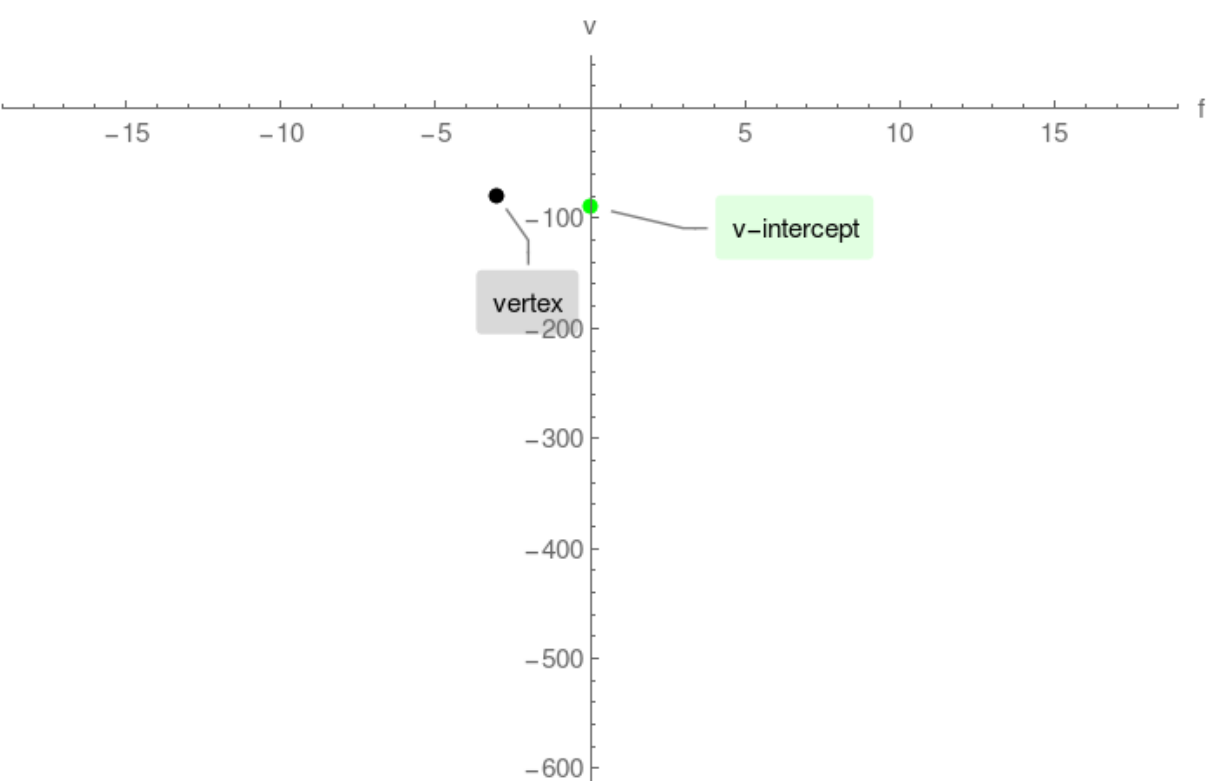
vertex = $(-3, -80)$



Step 2.

Compute v-intercept and plot single point:

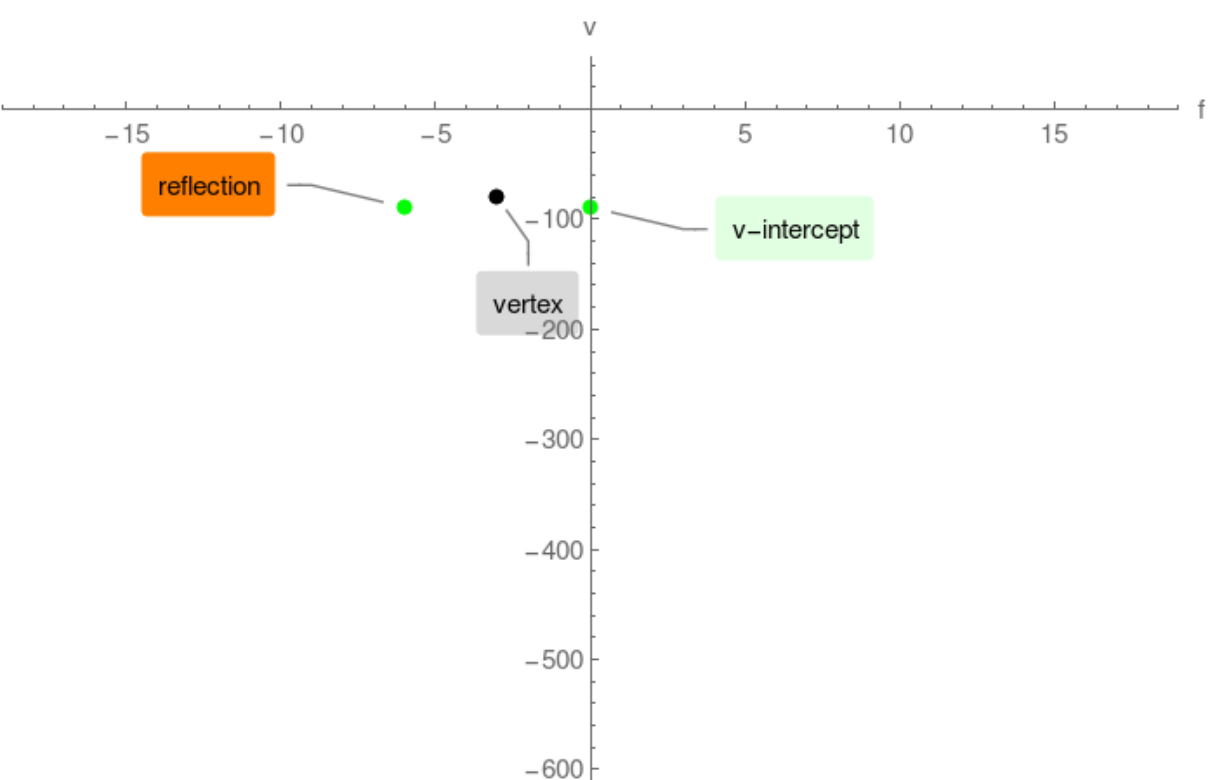
v-intercept = $(0, -89)$



Step 3.

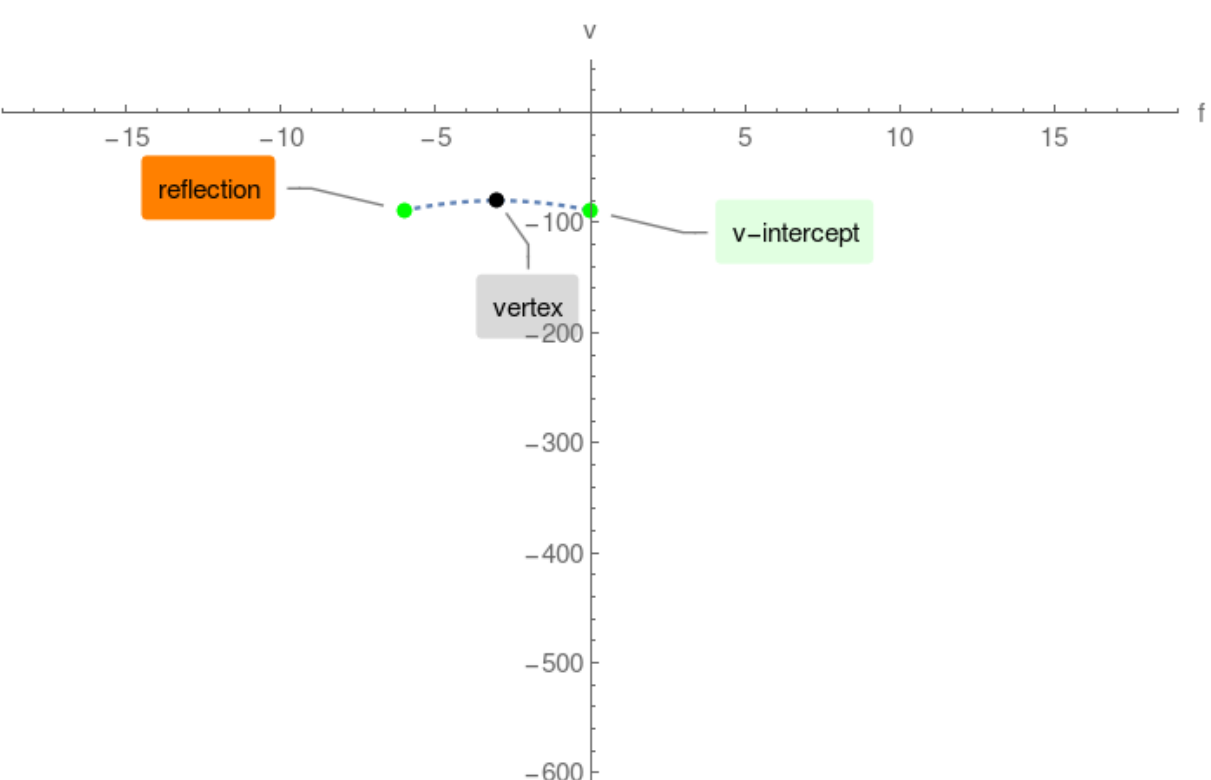
Compute v-intercept reflected against vertex,

reflection = $(-6, -89)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

