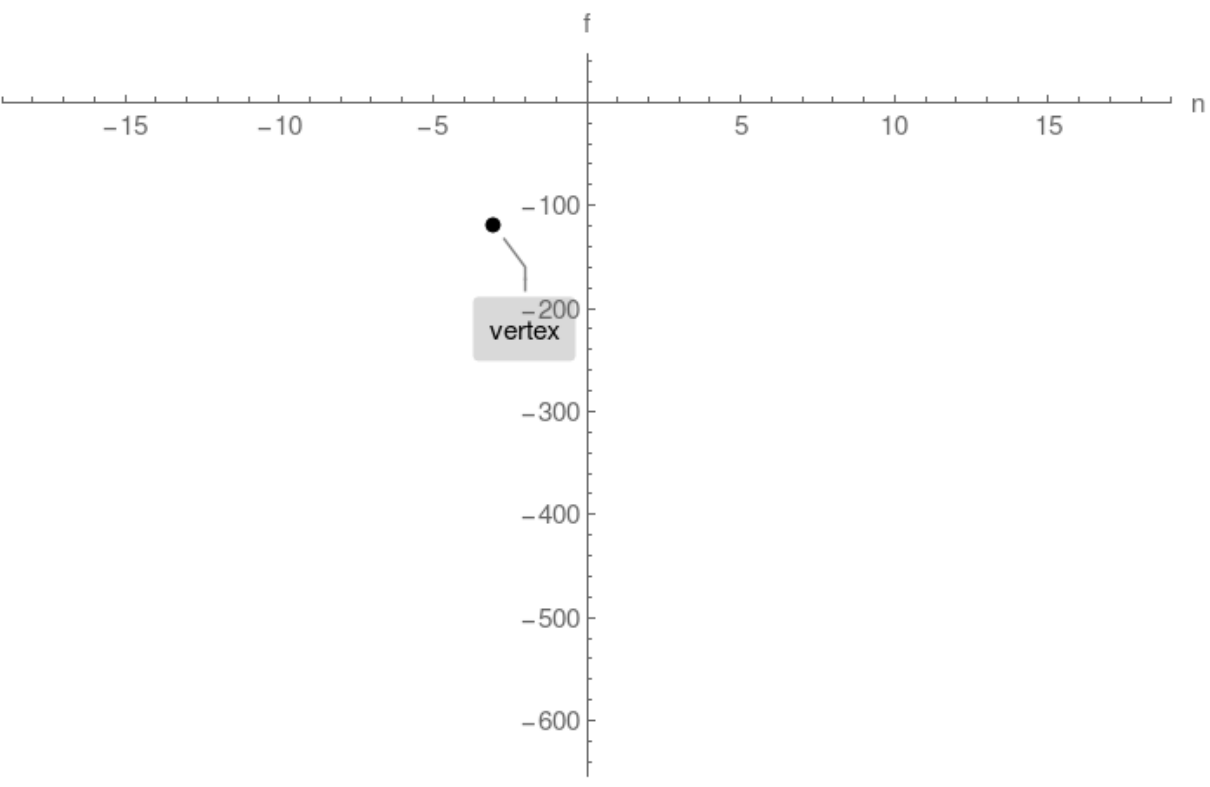
Example 2. No horizontal intercepts found

Plot $f(n) = -n^2 - 6n - 129$

Step 1.

Compute vertex and plot single point:

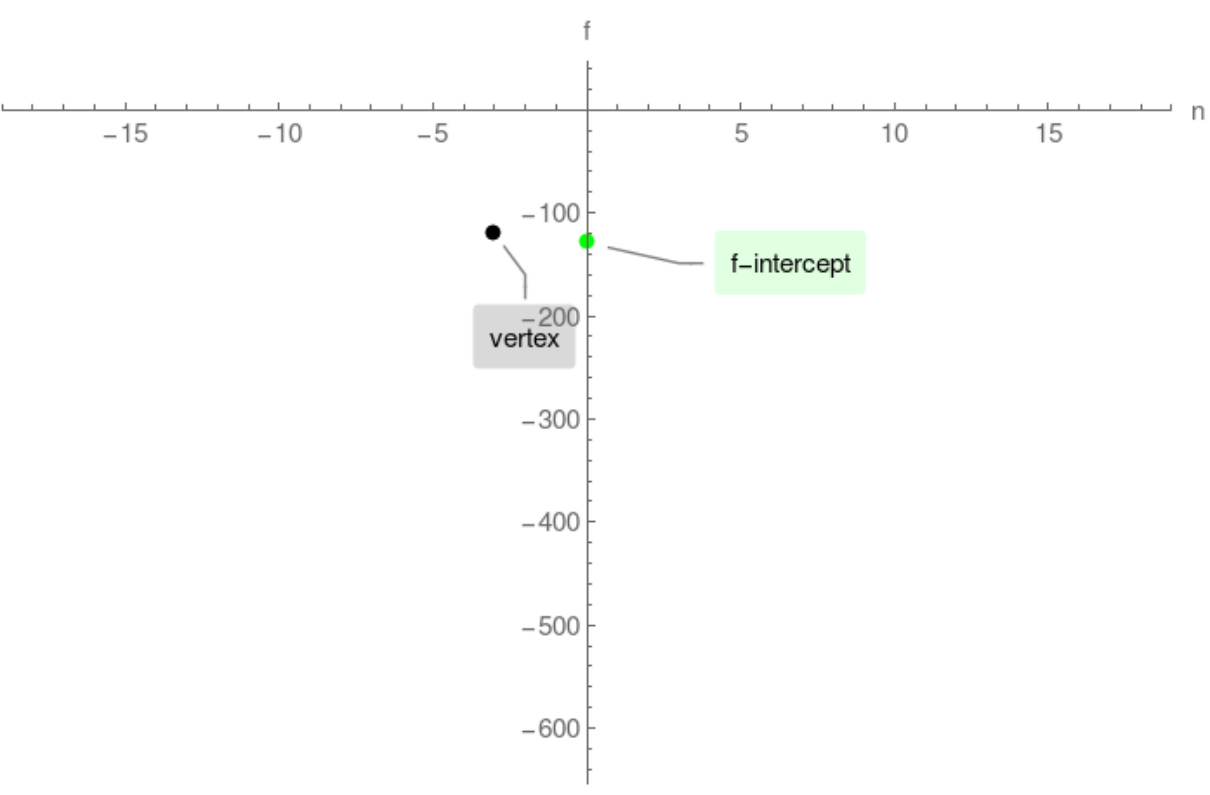
vertex $= (-3, -120)$



Step 2.

Compute f-intercept and plot single point:

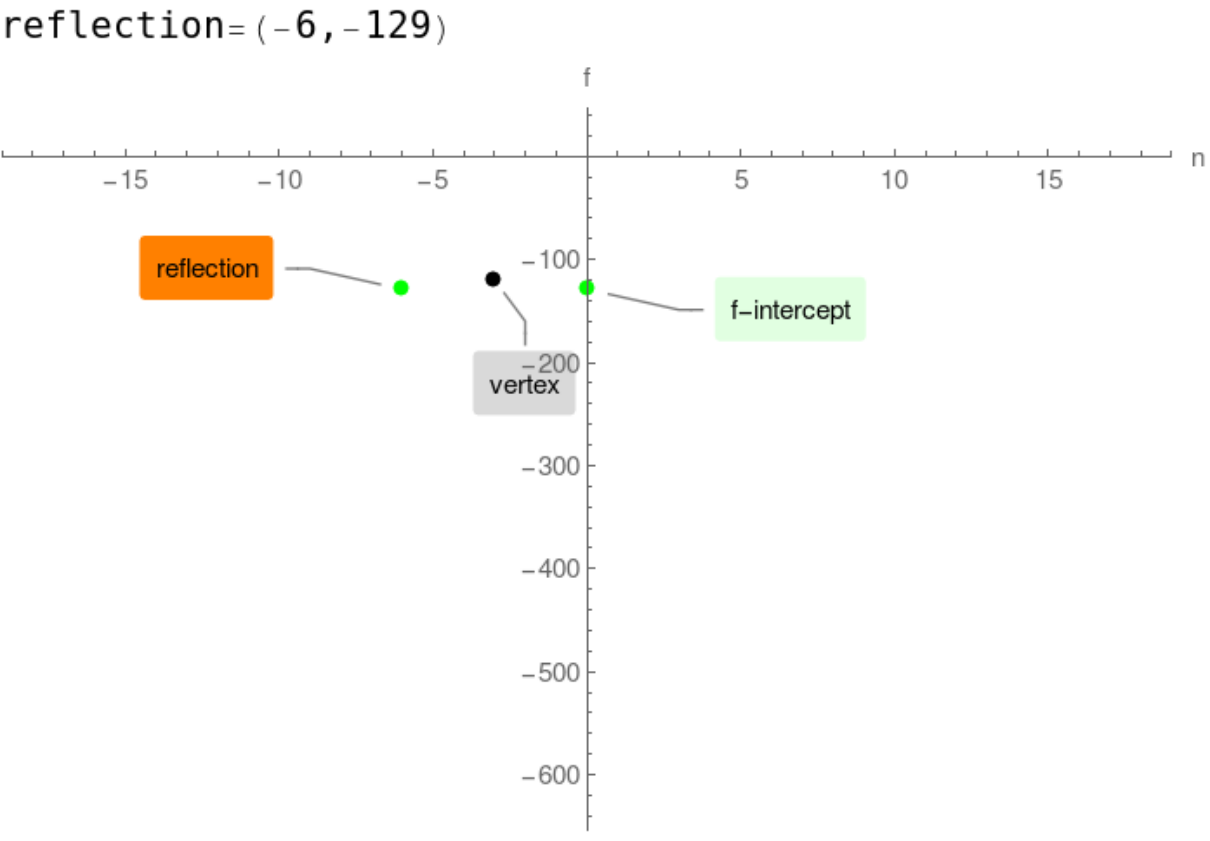
f-intercept $= (0, -129)$



Step 3.

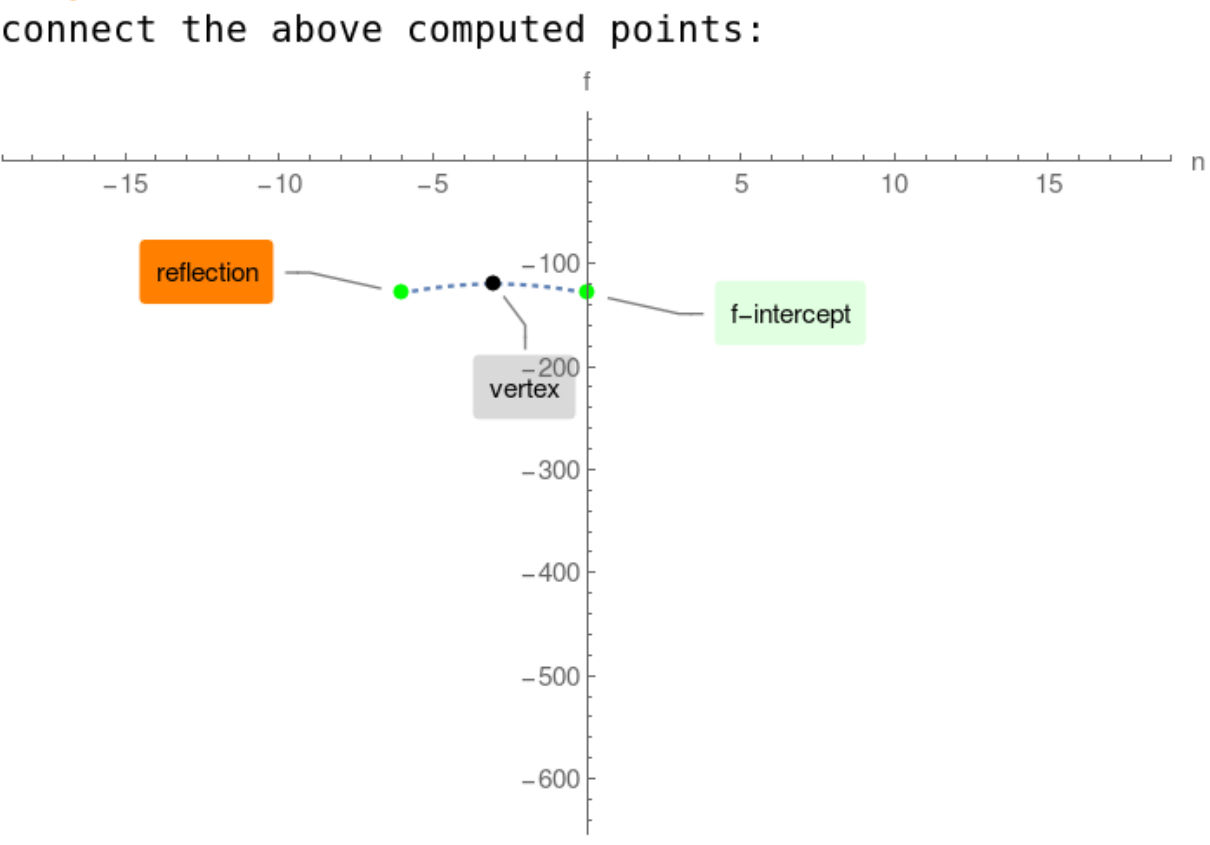
Compute f-intercept reflected against vertex,

reflection $= (-6, -129)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts