

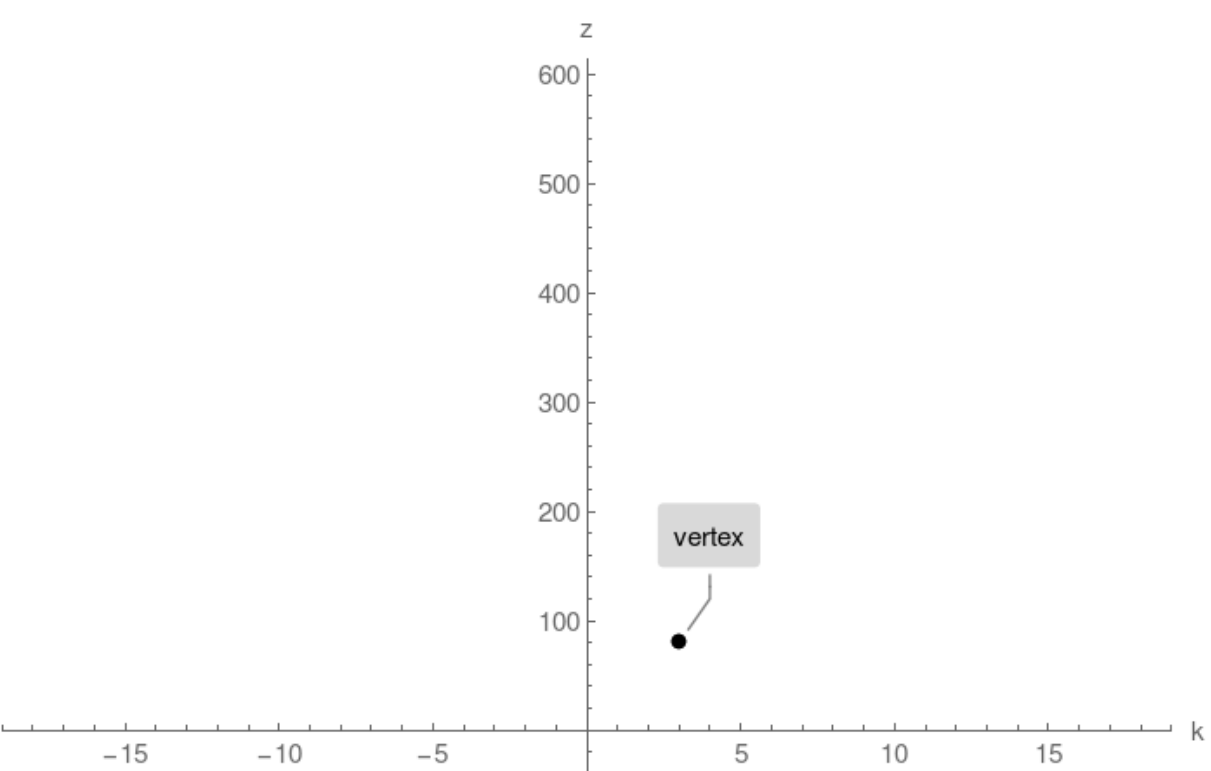
Example 2. No horizontal intercepts found

Plot $z(k) = k^2 - 6k + 89$

Step 1.

Compute vertex and plot single point:

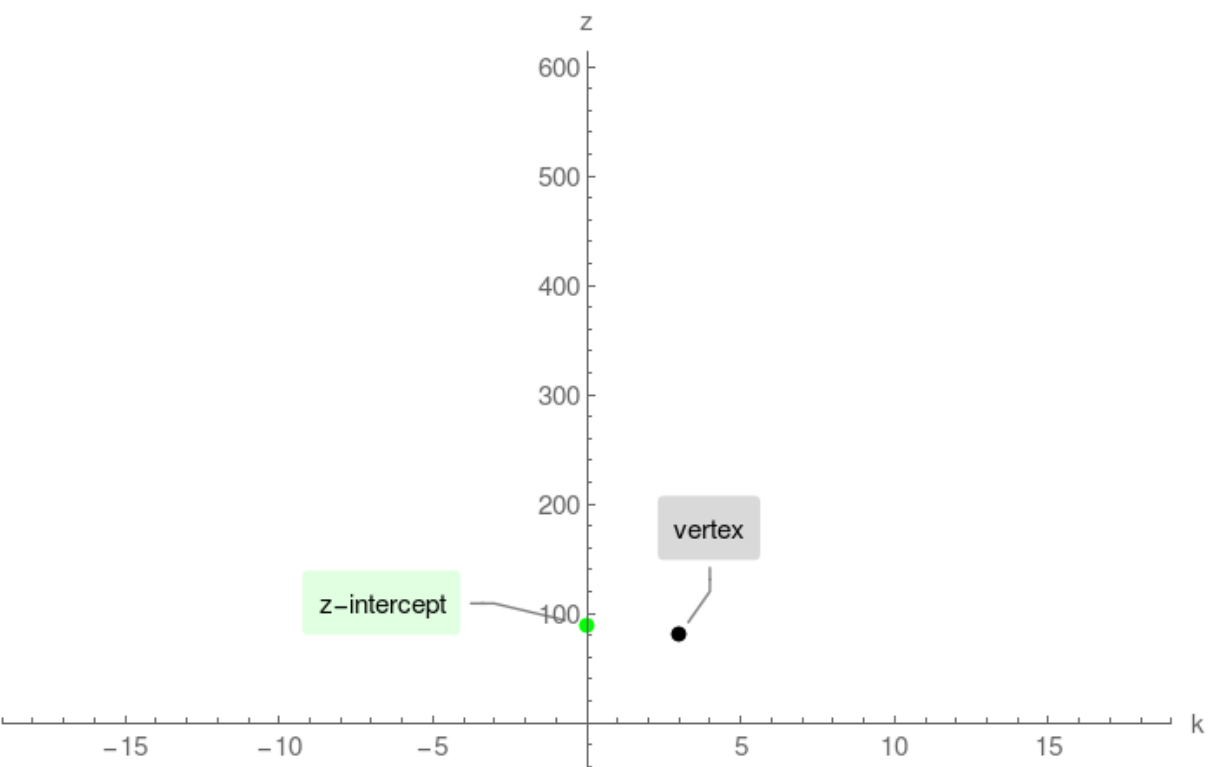
vertex = (3, 80)



Step 2.

Compute z-intercept and plot single point:

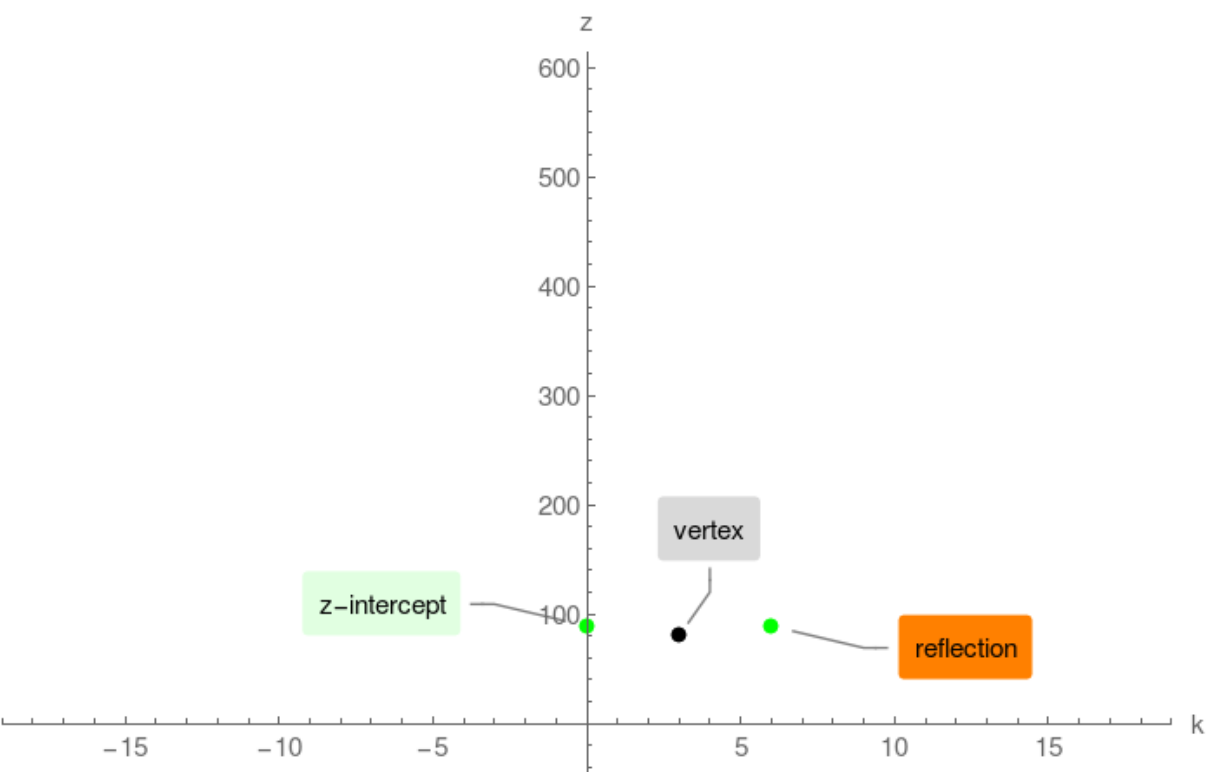
z-intercept = (0, 89)



Step 3.

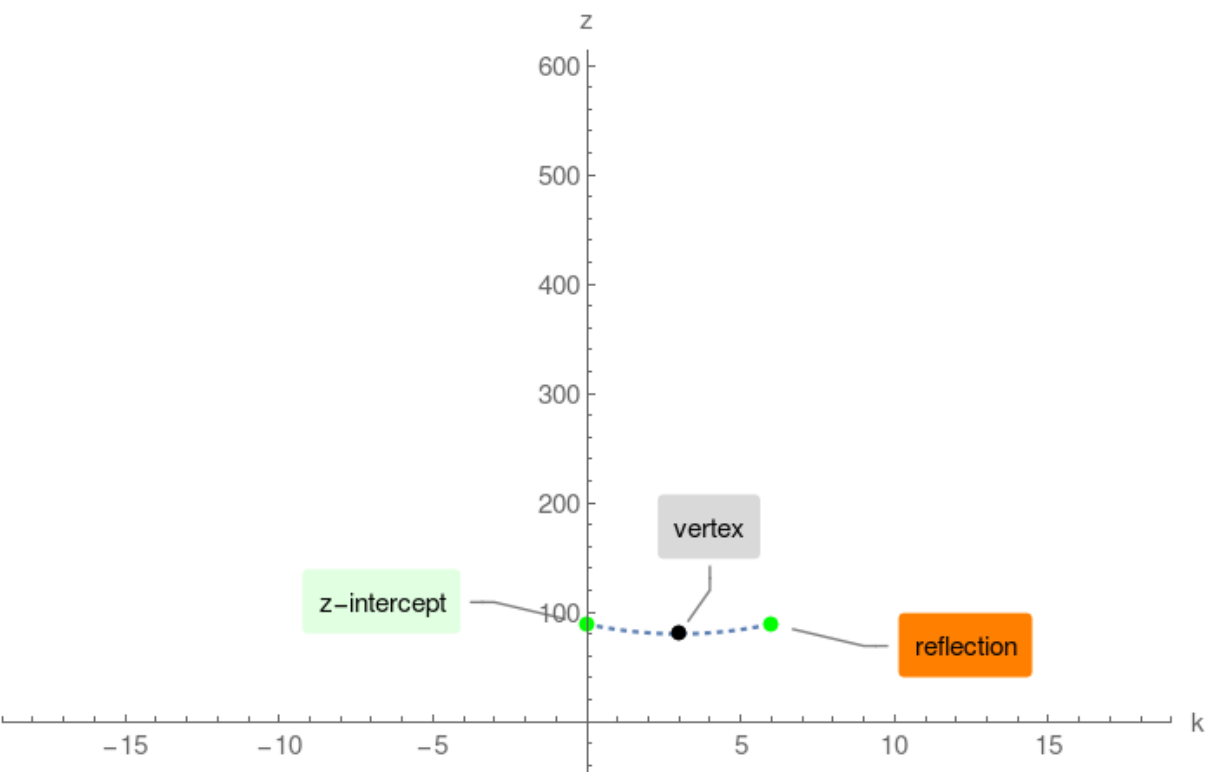
Compute z-intercept reflected against vertex,

reflection = (6, 89)



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

