

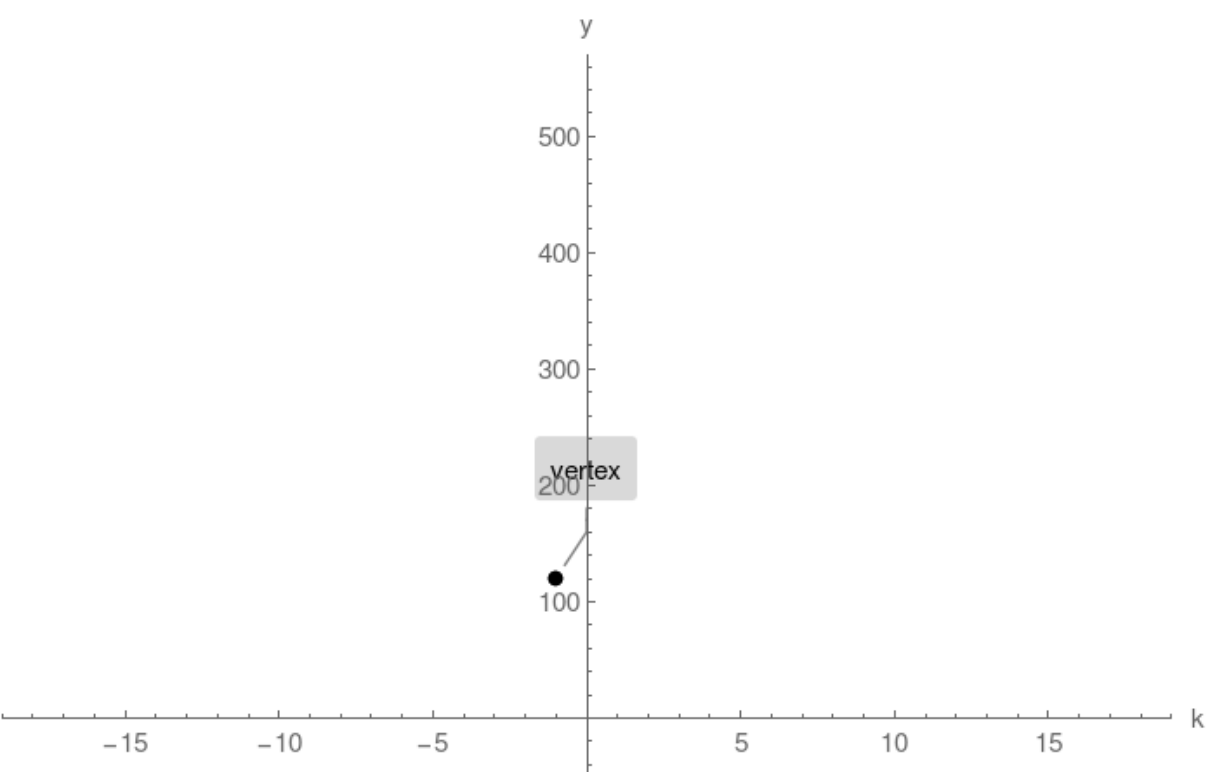
## Example 2. No horizontal intercepts found

Plot  $y(k) = k^2 + 2k + 121$

### Step 1.

Compute vertex and plot single point:

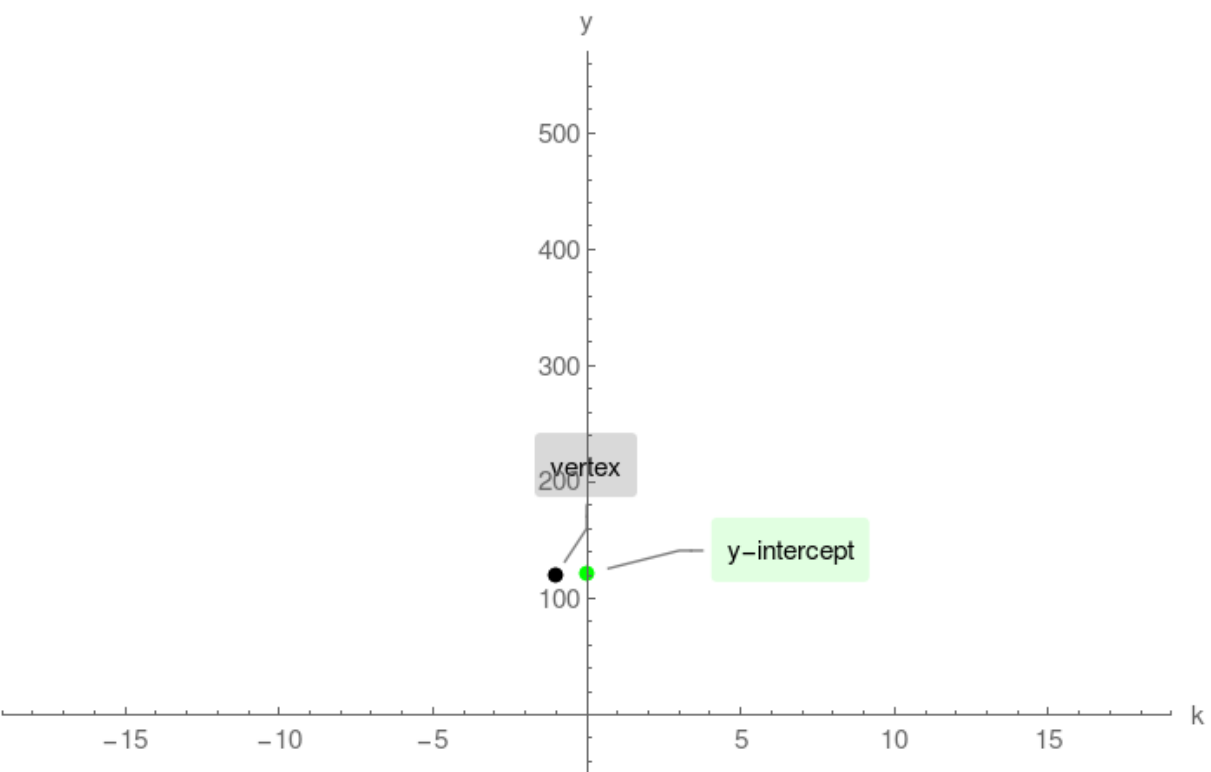
vertex =  $(-1, 120)$



### Step 2.

Compute y-intercept and plot single point:

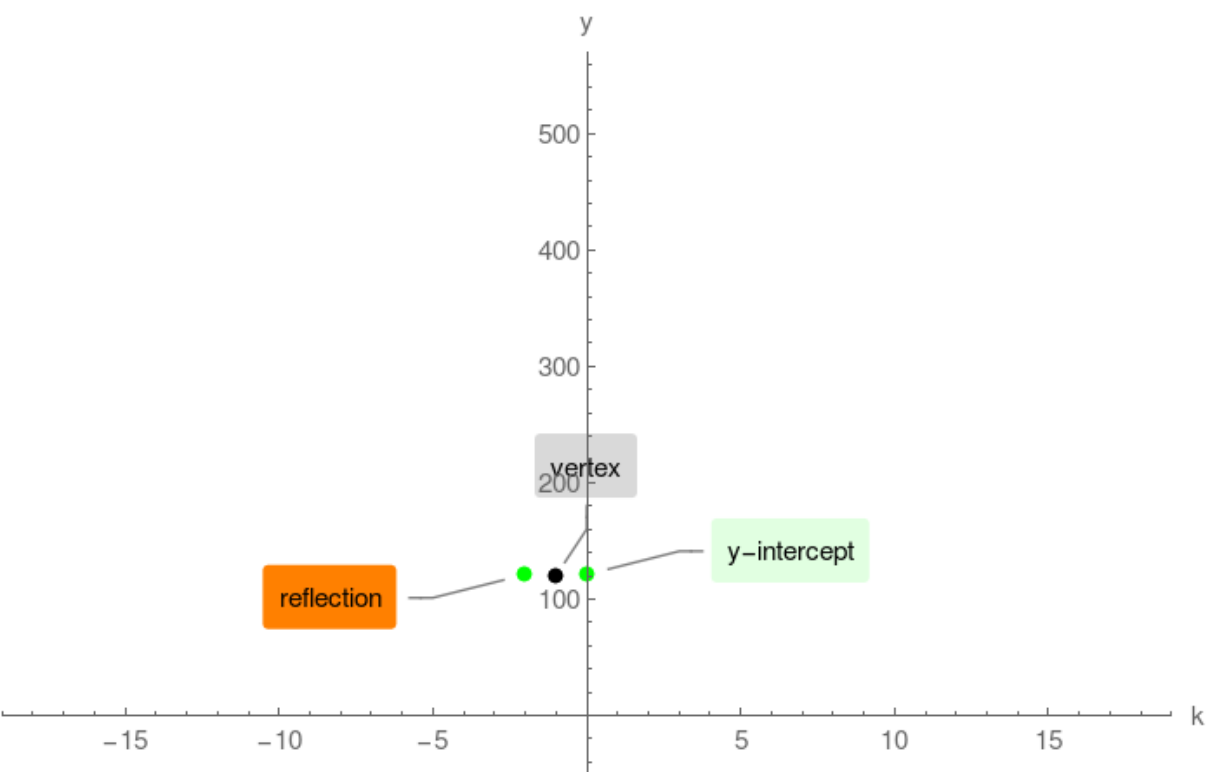
y-intercept =  $(0, 121)$



### Step 3.

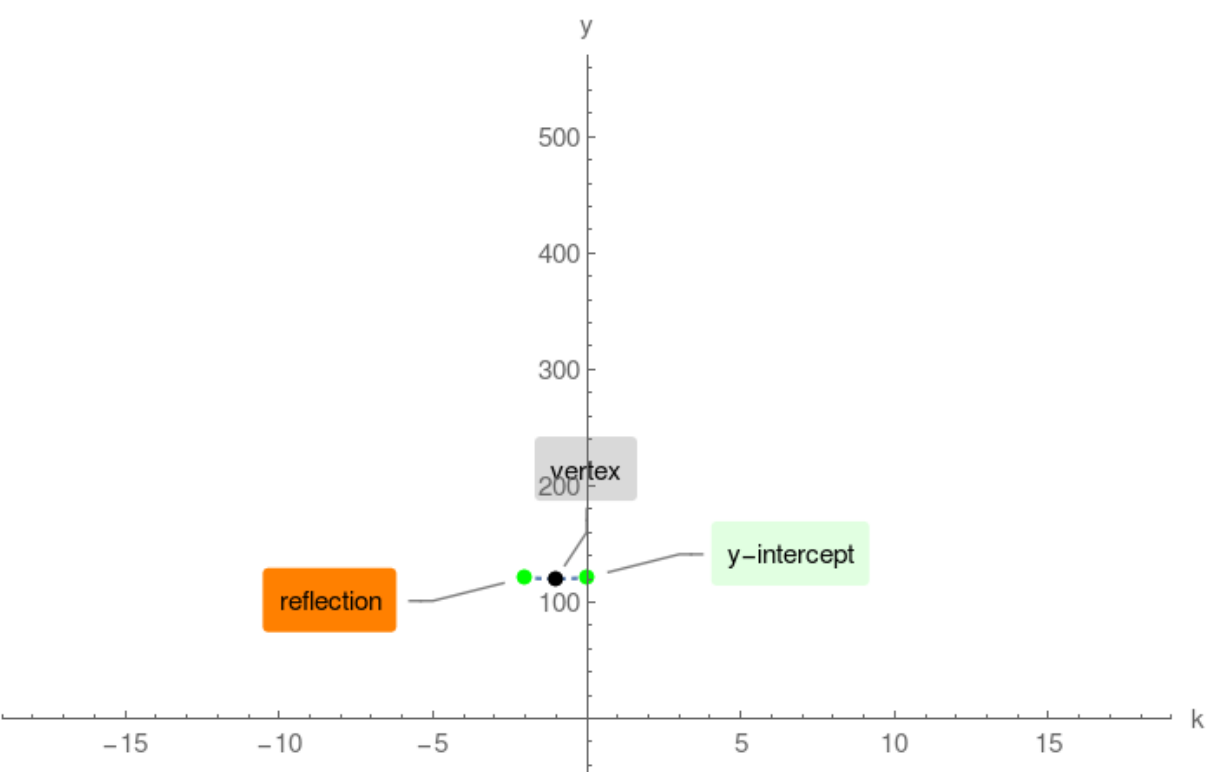
Compute y-intercept reflected against vertex,

reflection =  $(-2, 121)$



### Step 4.

connect the above computed points:



### Step 5.

Extend the parabola beyond the range of intercepts

