

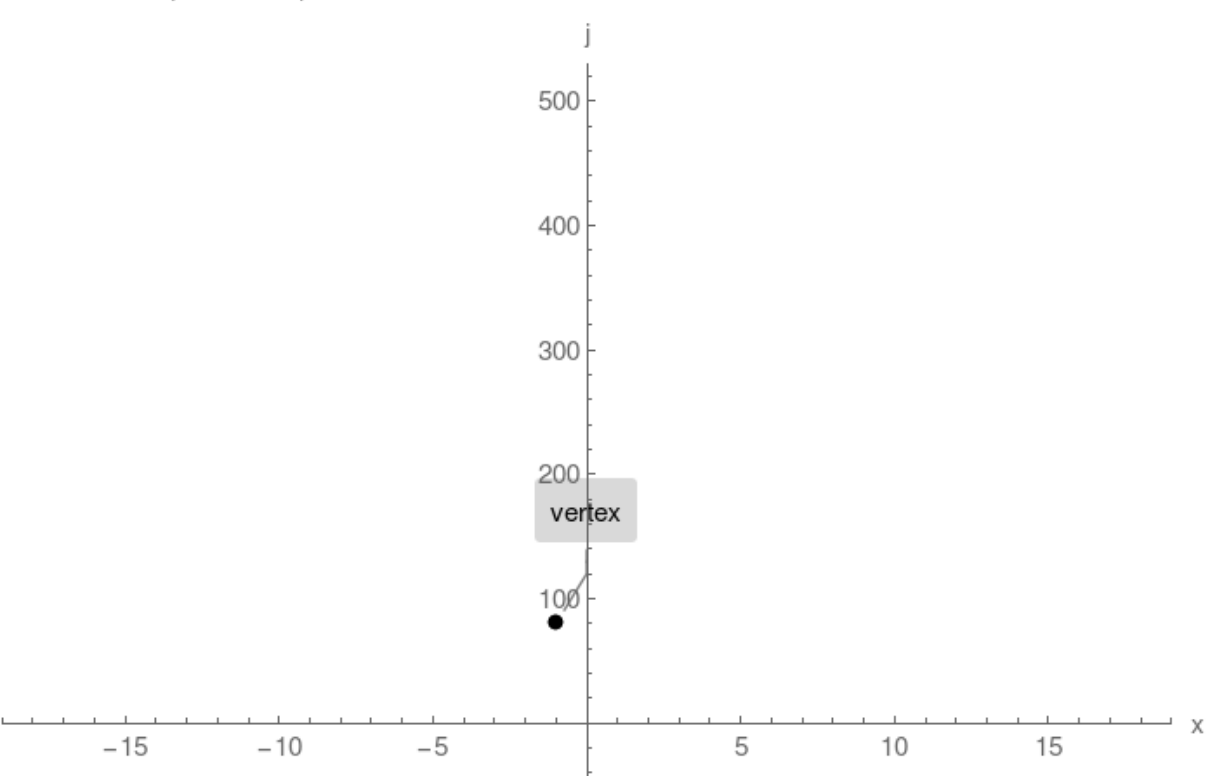
## Example 2. No horizontal intercepts found

Plot  $j(x) = x^2 + 2x + 81$

### Step 1.

Compute vertex and plot single point:

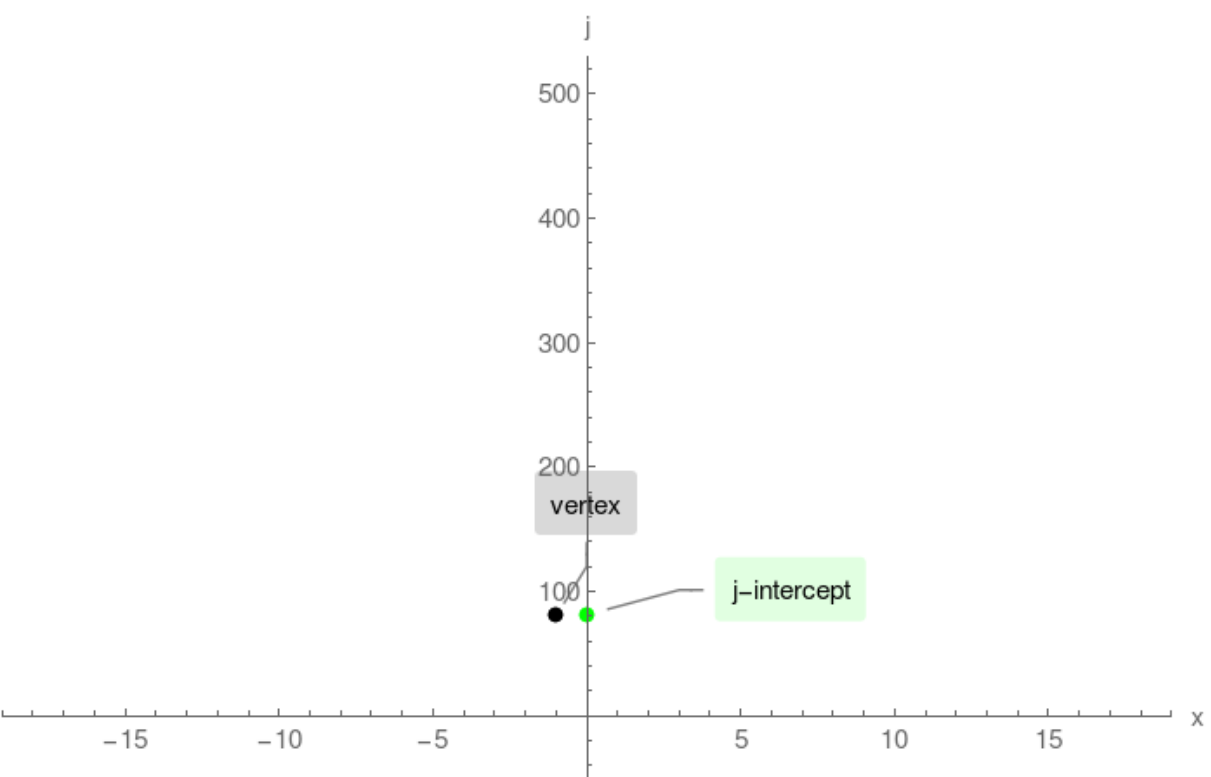
vertex =  $(-1, 80)$



### Step 2.

Compute j-intercept and plot single point:

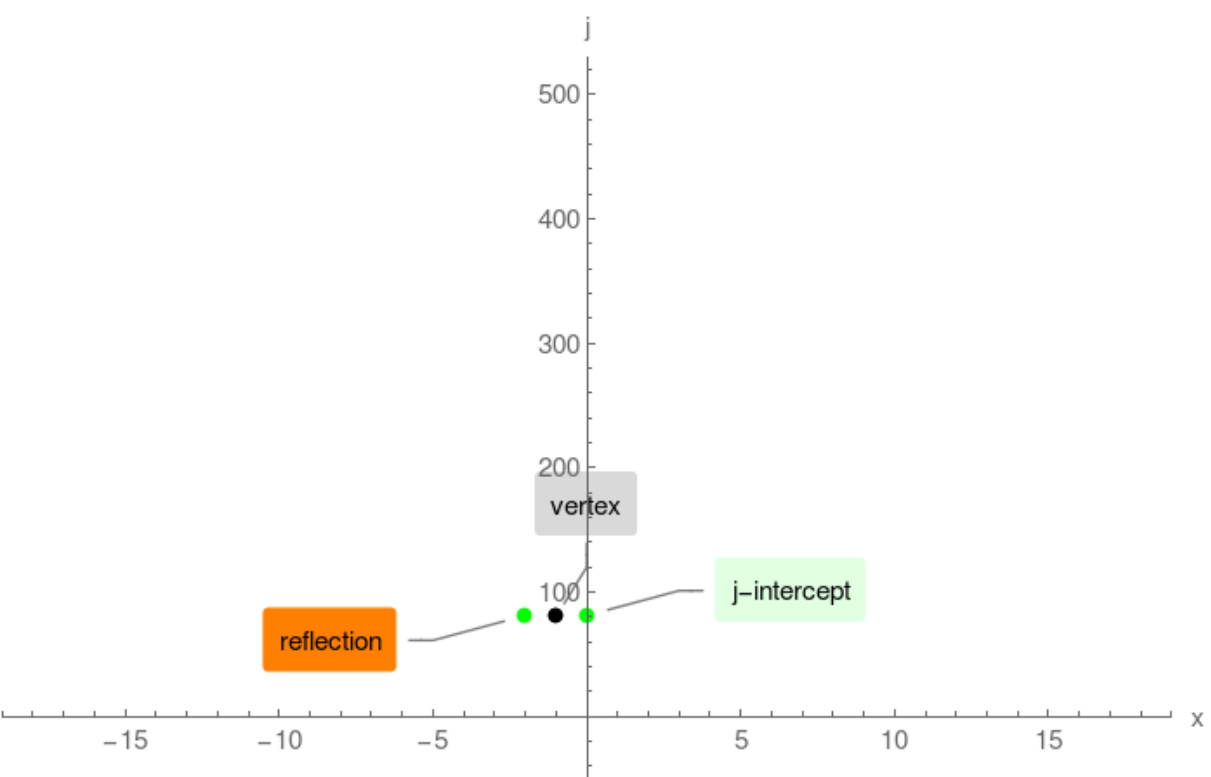
j-intercept =  $(0, 81)$



### Step 3.

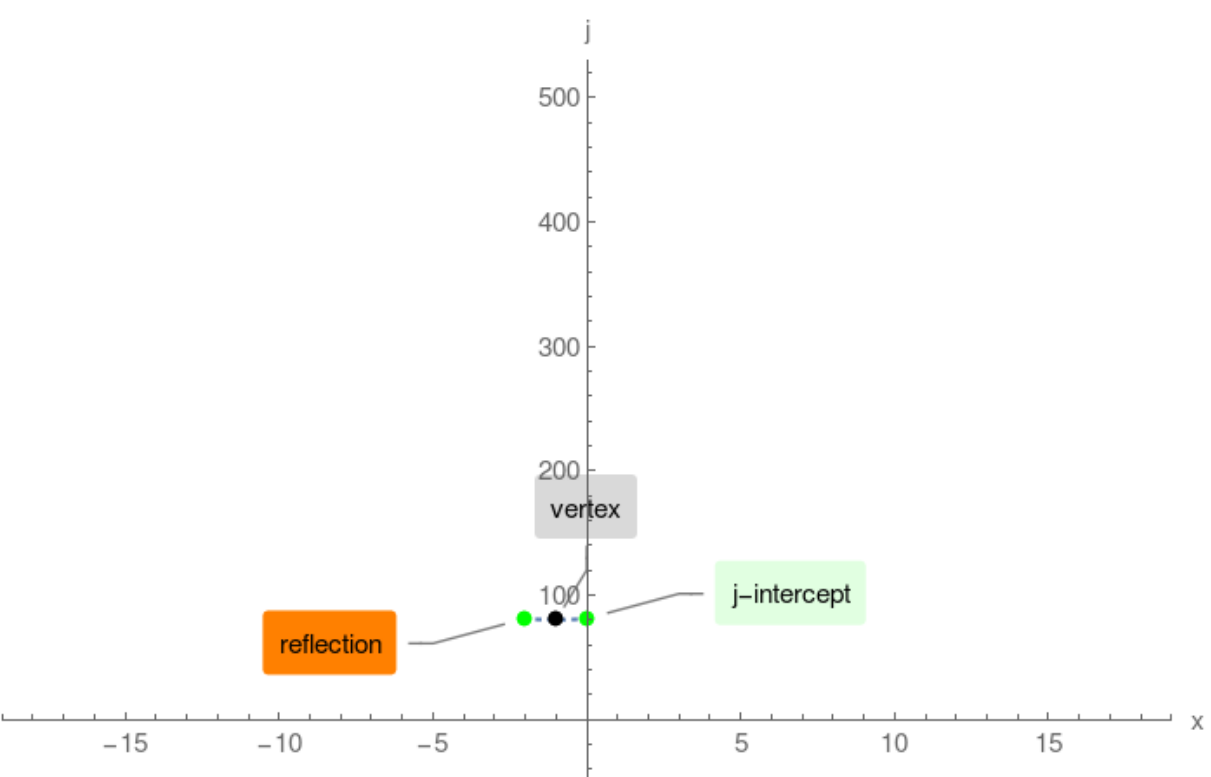
Compute j-intercept reflected against vertex,

reflection =  $(-2, 81)$



### Step 4.

connect the above computed points:



### Step 5.

Extend the parabola beyond the range of intercepts

