

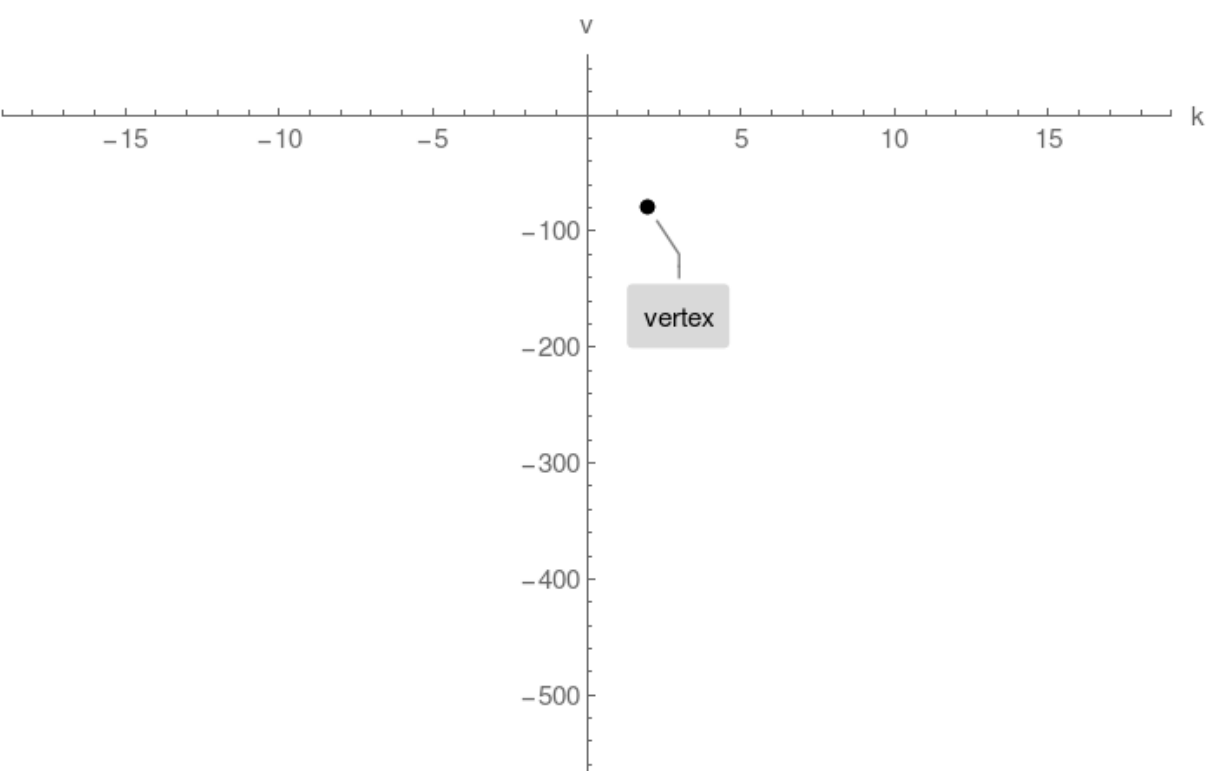
## Example 2. No horizontal intercepts found

Plot  $v(k) = -k^2 + 4k - 84$

### Step 1.

Compute vertex and plot single point:

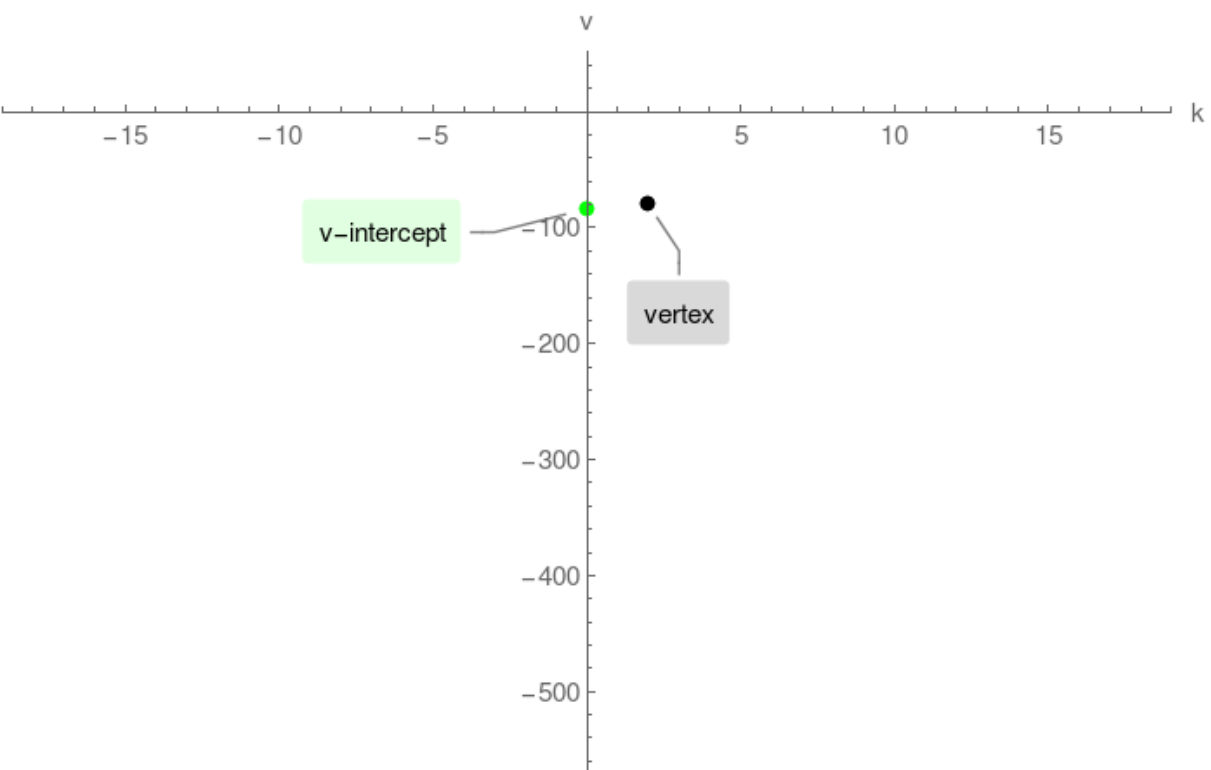
vertex =  $(2, -80)$



### Step 2.

Compute v-intercept and plot single point:

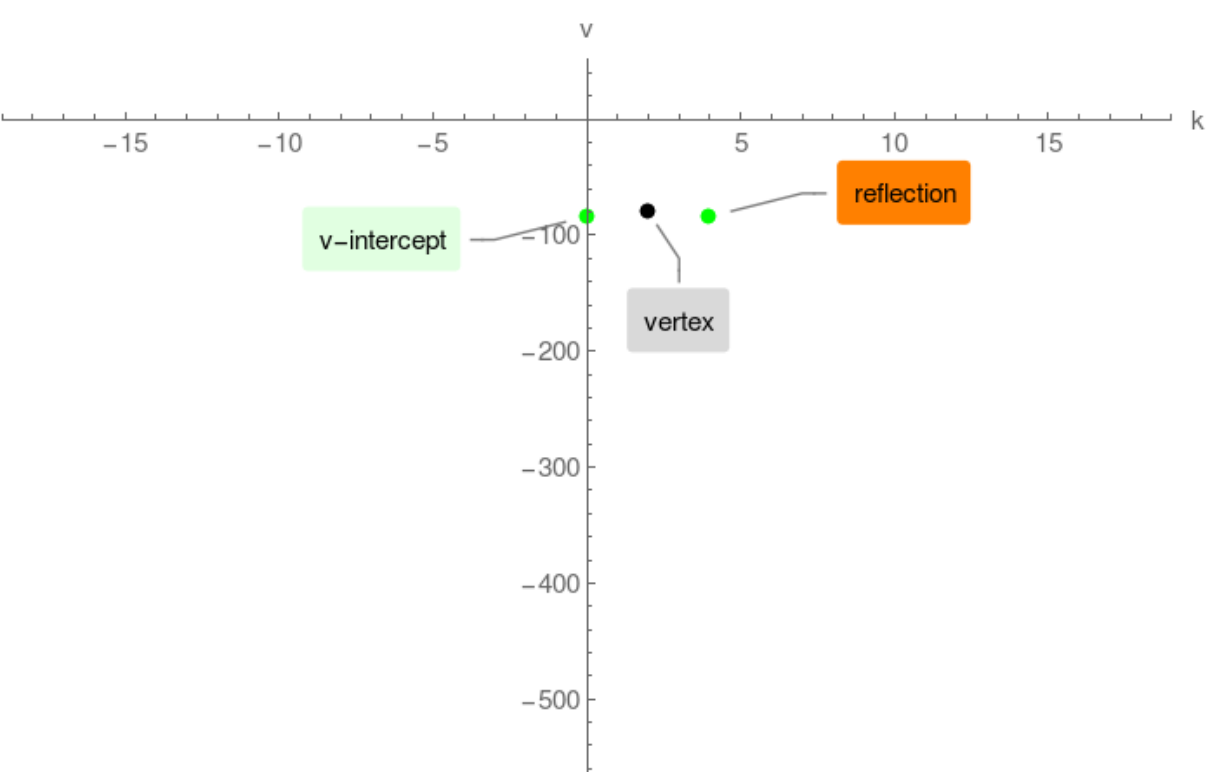
v-intercept =  $(0, -84)$



### Step 3.

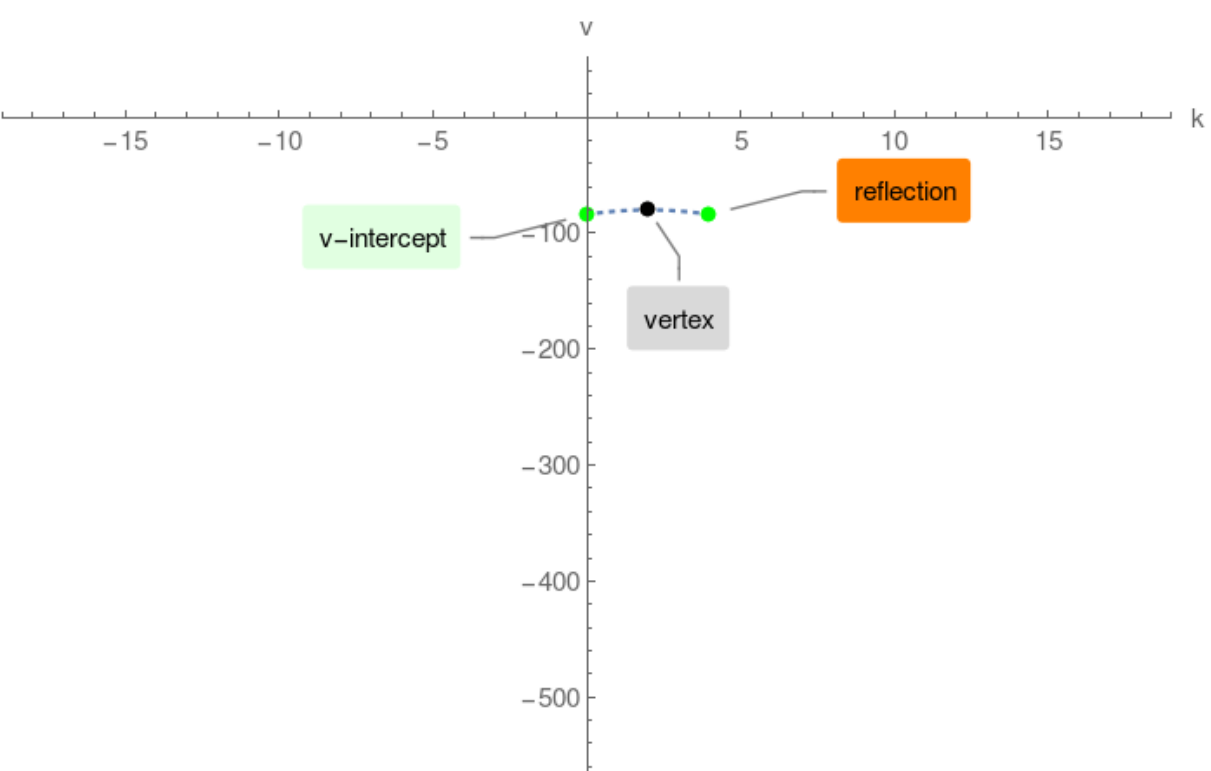
Compute v-intercept reflected against vertex,

reflection =  $(4, -84)$



### Step 4.

connect the above computed points:



### Step 5.

Extend the parabola beyond the range of intercepts

