

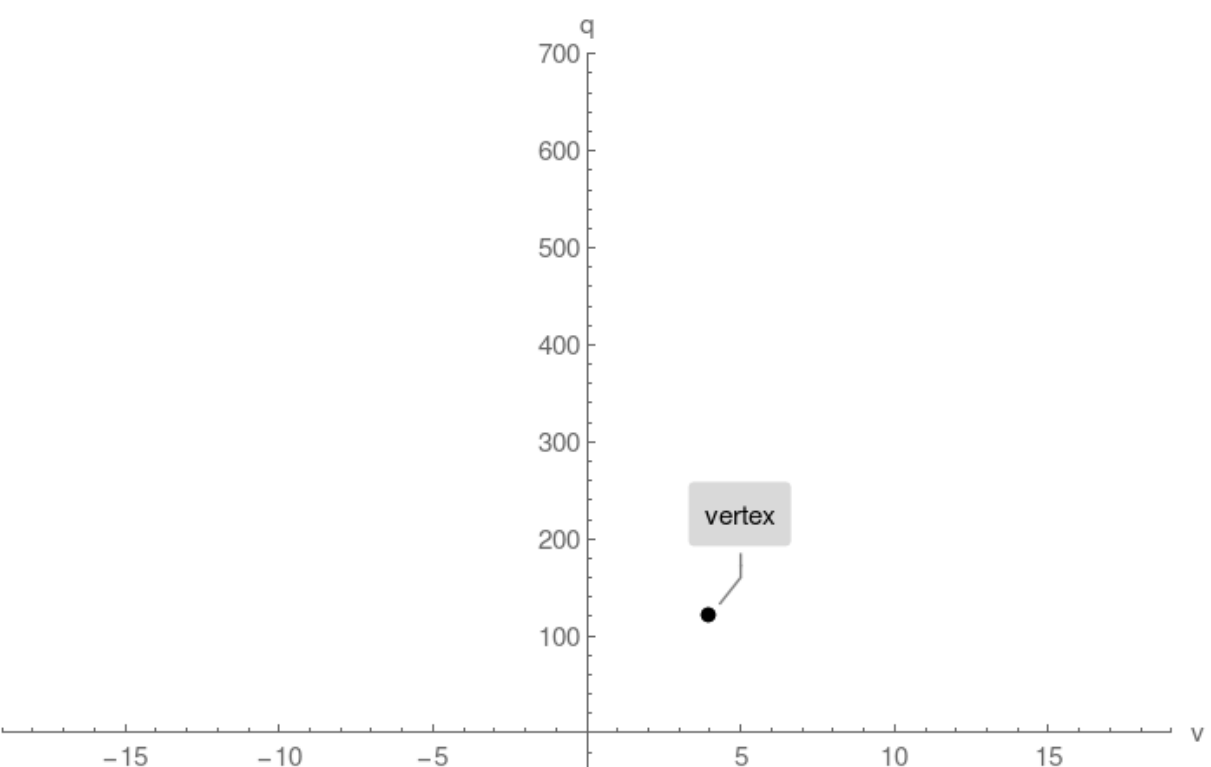
## Example 2. No horizontal intercepts found

Plot  $q(v) = v^2 - 8v + 136$

### Step 1.

Compute vertex and plot single point:

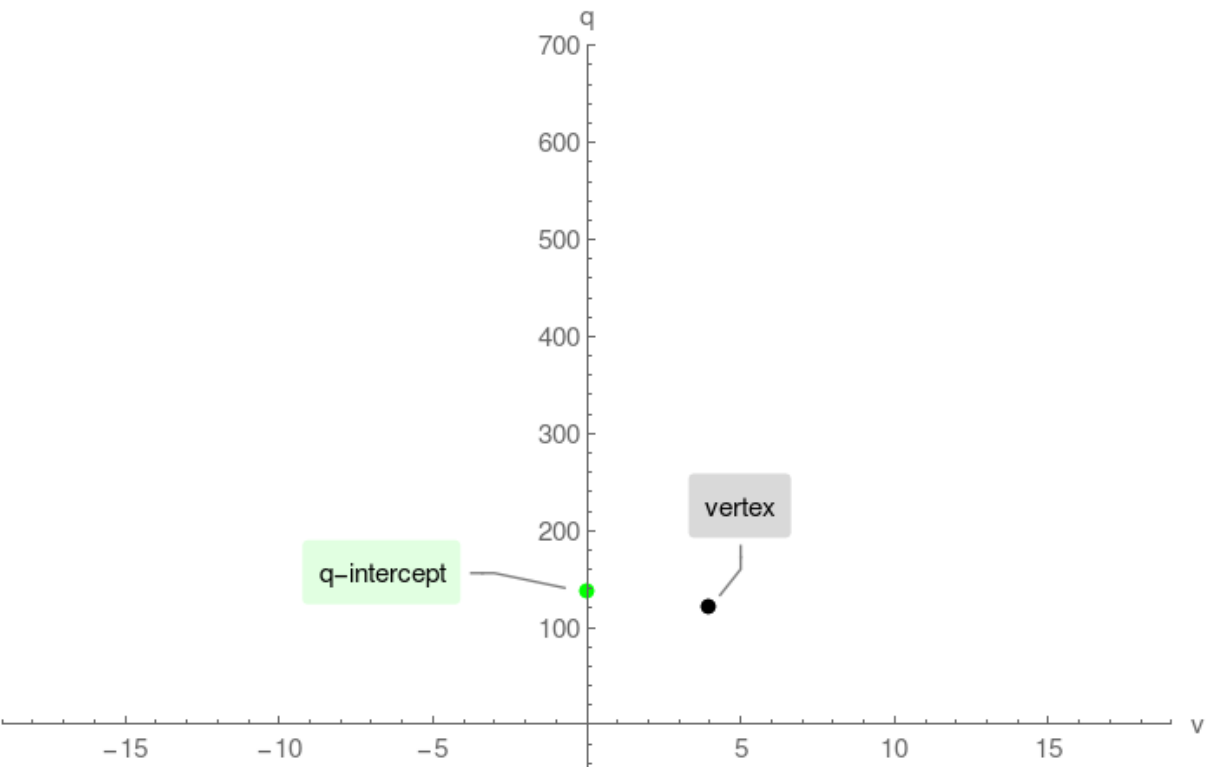
vertex = (4, 120)



### Step 2.

Compute  $q$ -intercept and plot single point:

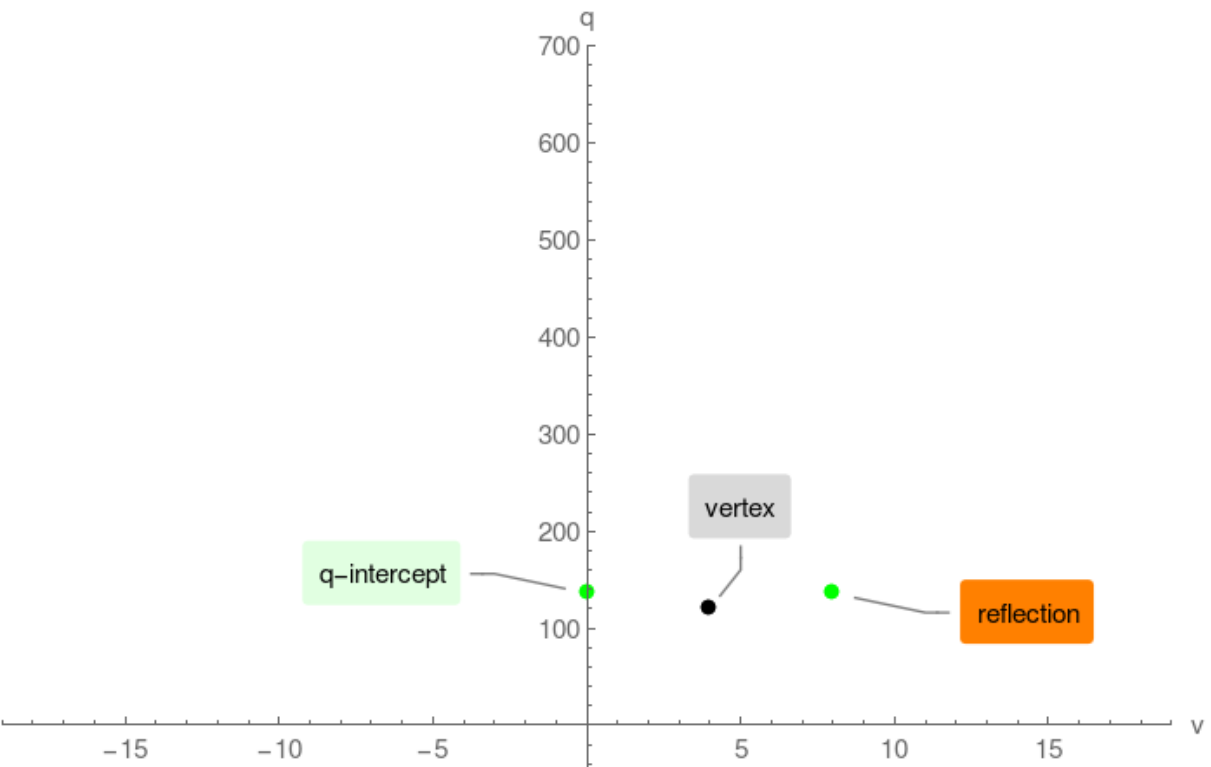
$q$ -intercept = (0, 136)



### Step 3.

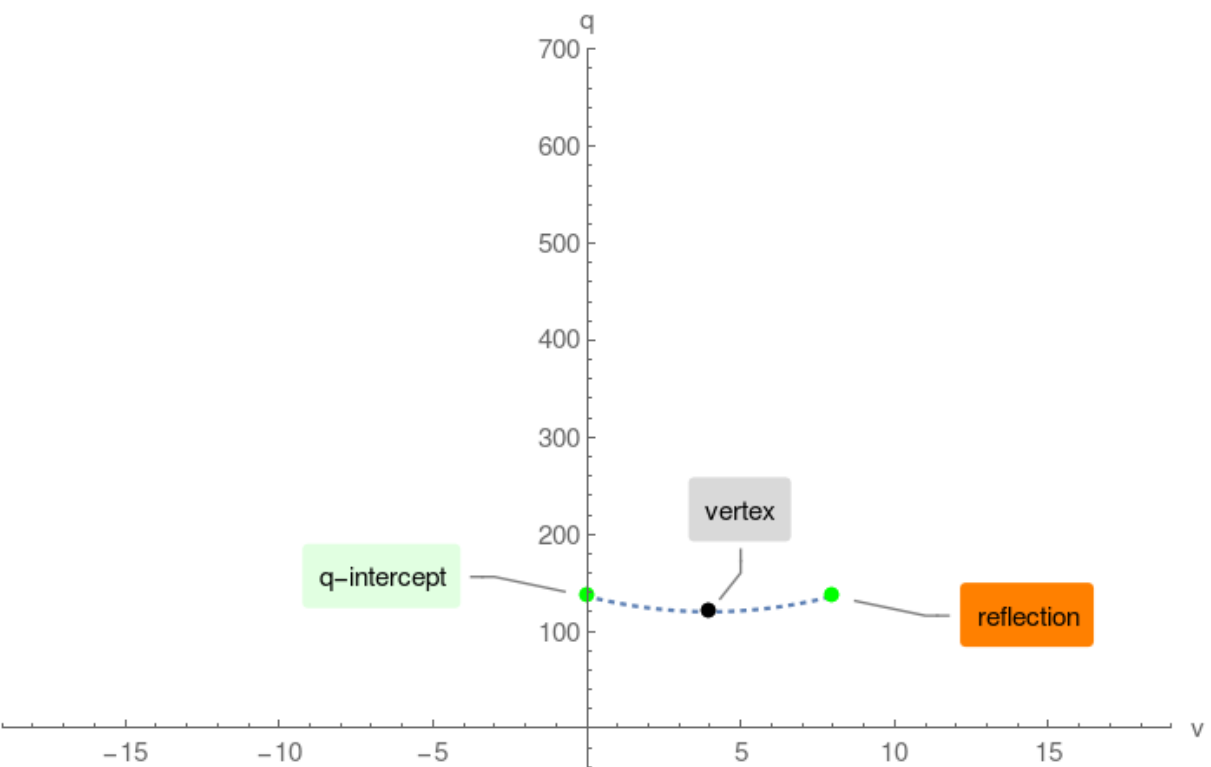
Compute  $q$ -intercept reflected against vertex,

reflection = (8, 136)



### Step 4.

connect the above computed points:



### Step 5.

Extend the parabola beyond the range of intercepts

