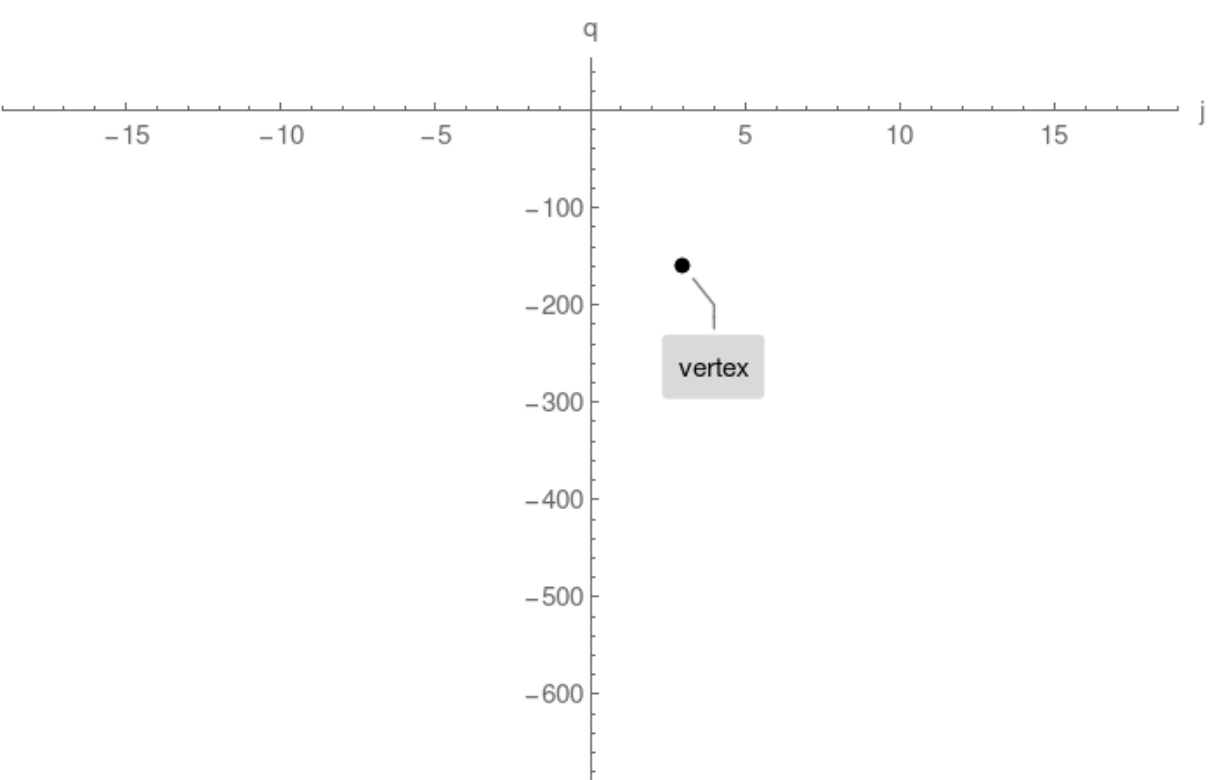# Example 2. No horizontal intercepts found

Plot $q(j) = -j^2 + 6j - 169$

## Step 1.
Compute vertex and plot single point:
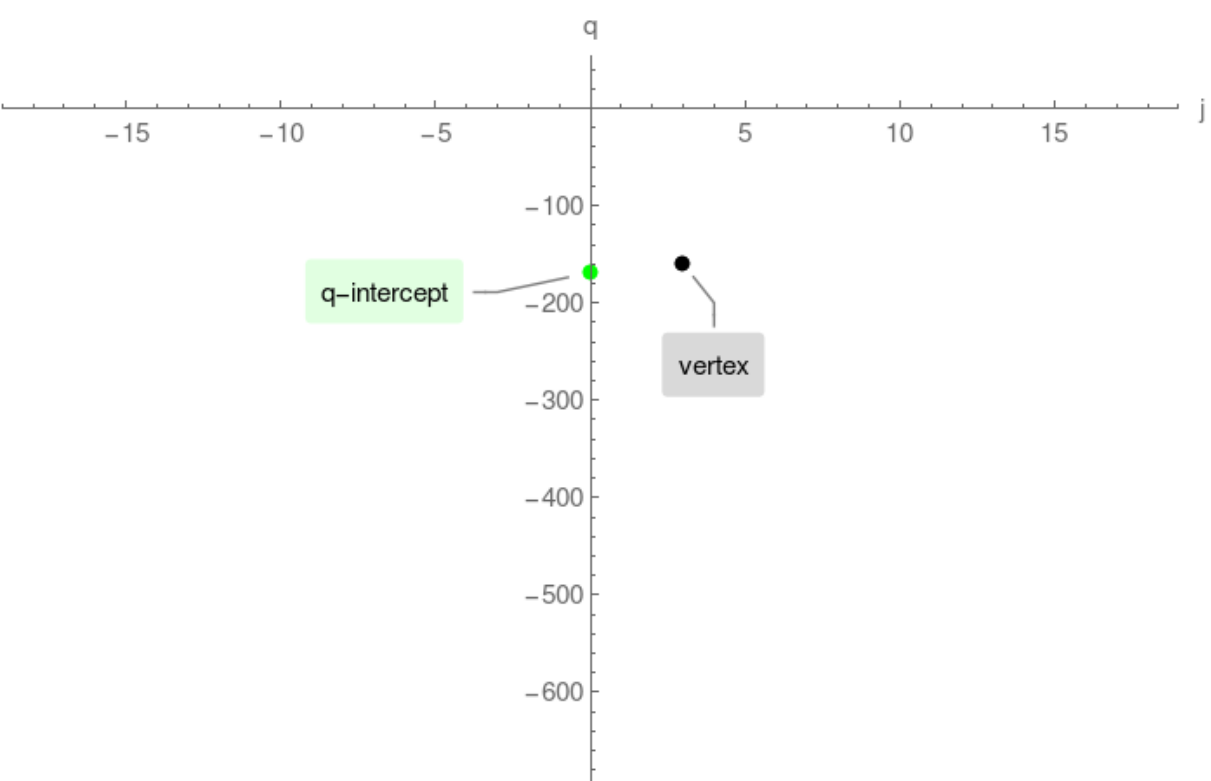vertex = $(3, -160)$


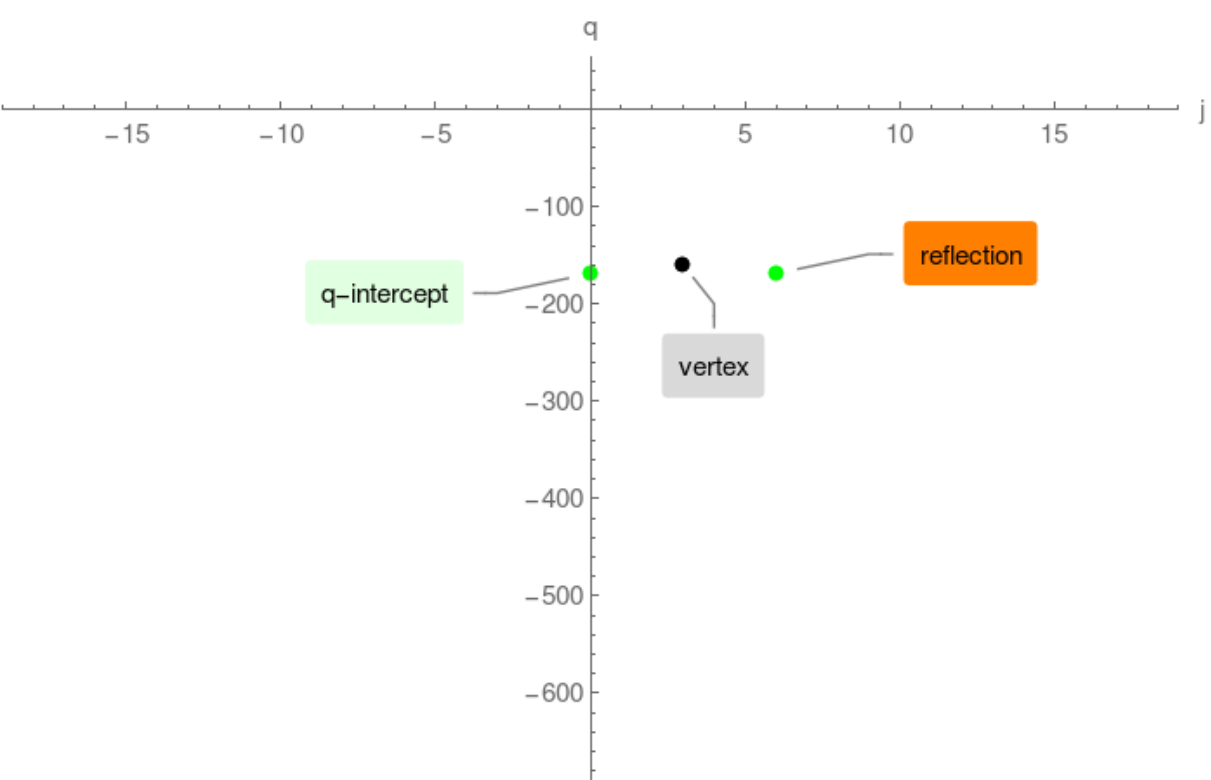
## Step 2.
Compute q-intercept and plot single point:
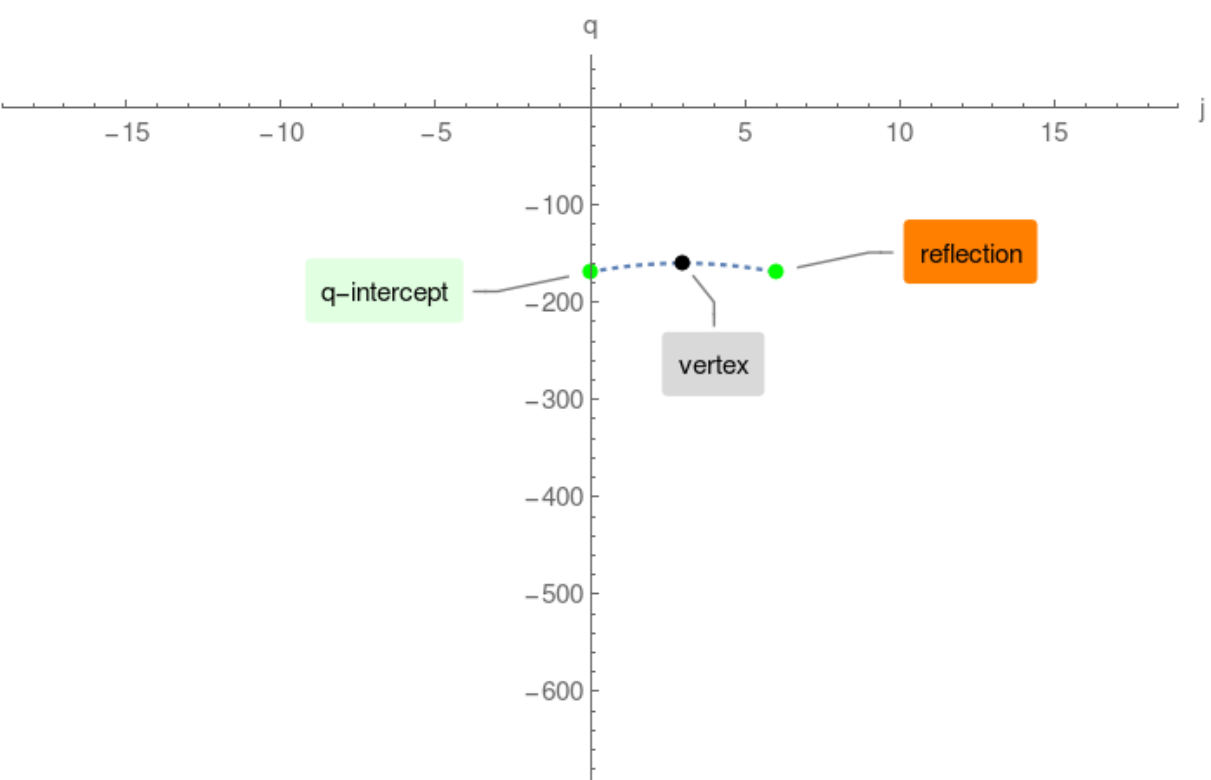q-intercept = $(0, -169)$



## Step 3.
Compute q-intercept reflected against vertex,
reflection = $(6, -169)$



## Step 4.
connect the above computed points:



## Step 5.
Extend the parabola beyond the range of intercepts