

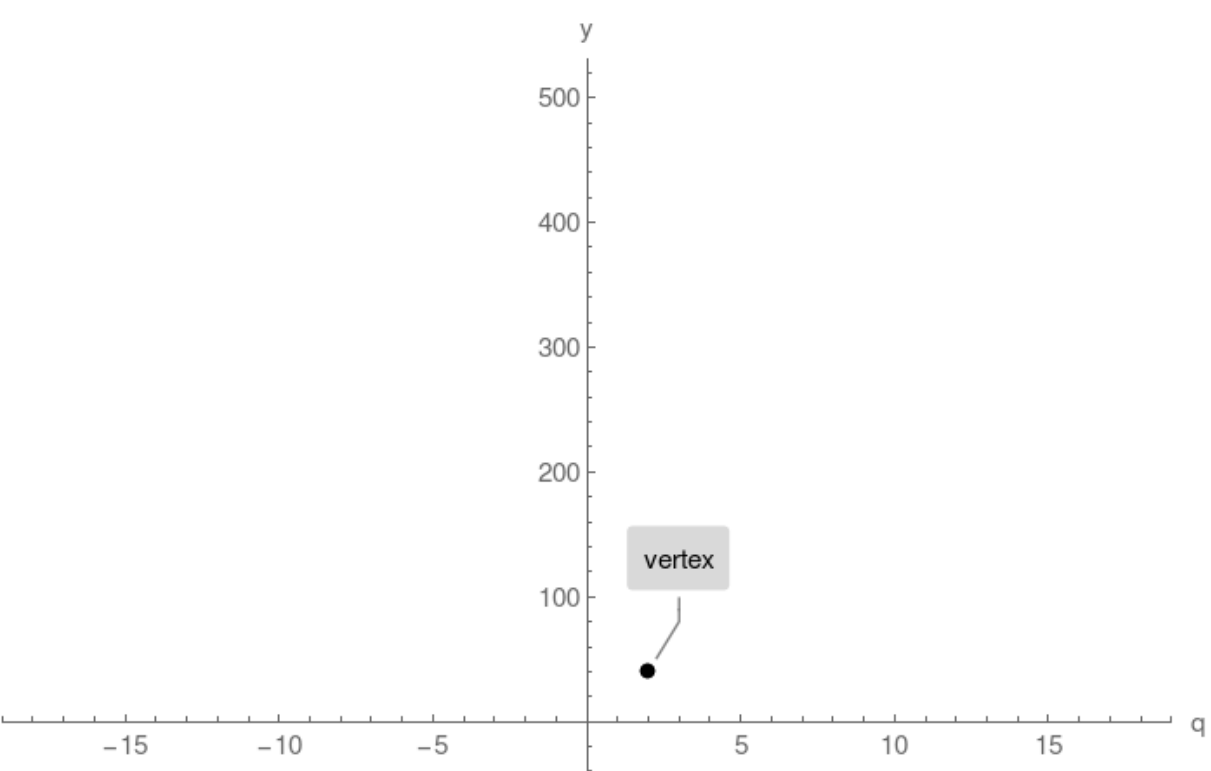
Example 2. No horizontal intercepts found

Plot $y(q) = q^2 - 4q + 44$

Step 1.

Compute vertex and plot single point:

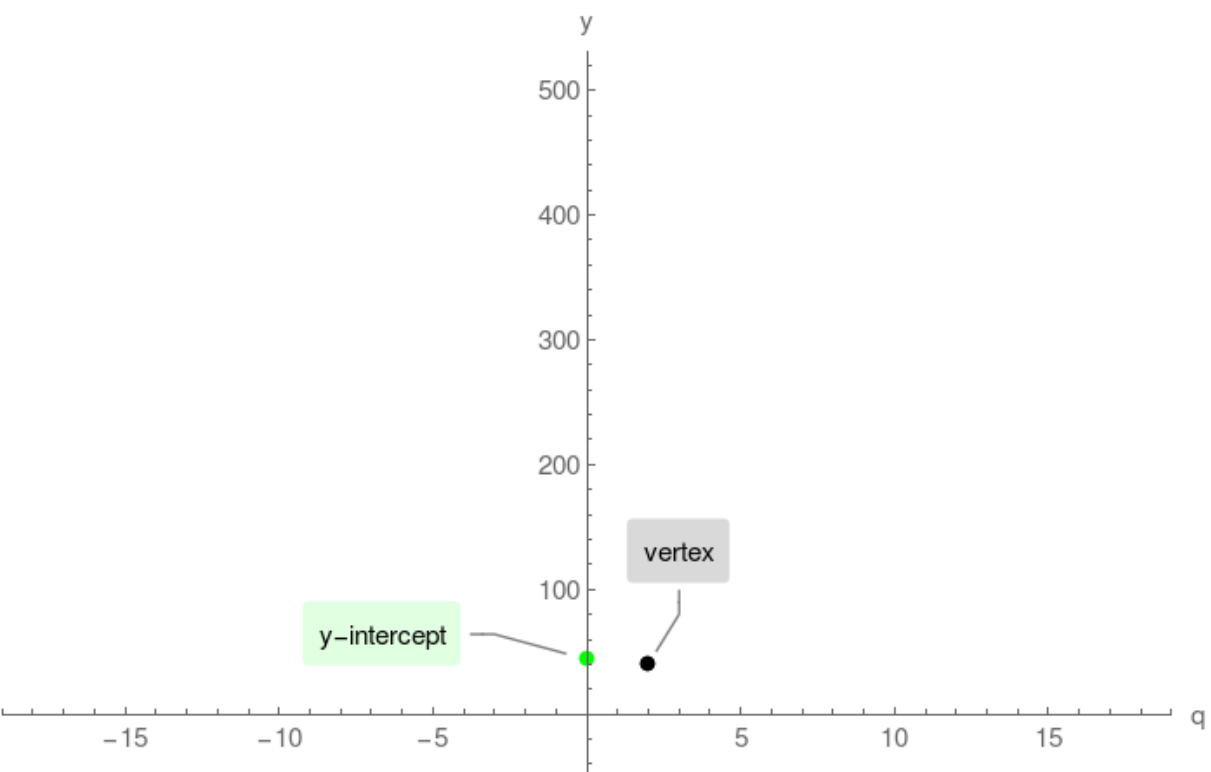
vertex = (2, 40)



Step 2.

Compute y-intercept and plot single point:

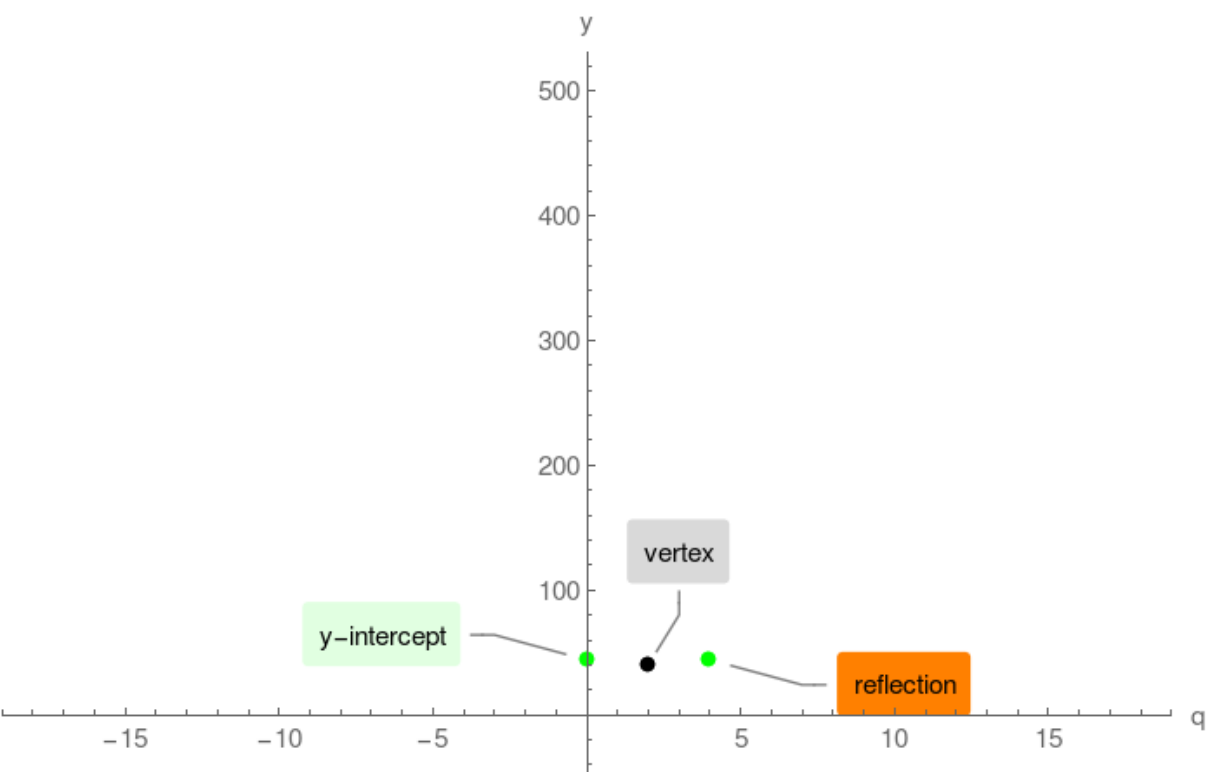
y-intercept = (0, 44)



Step 3.

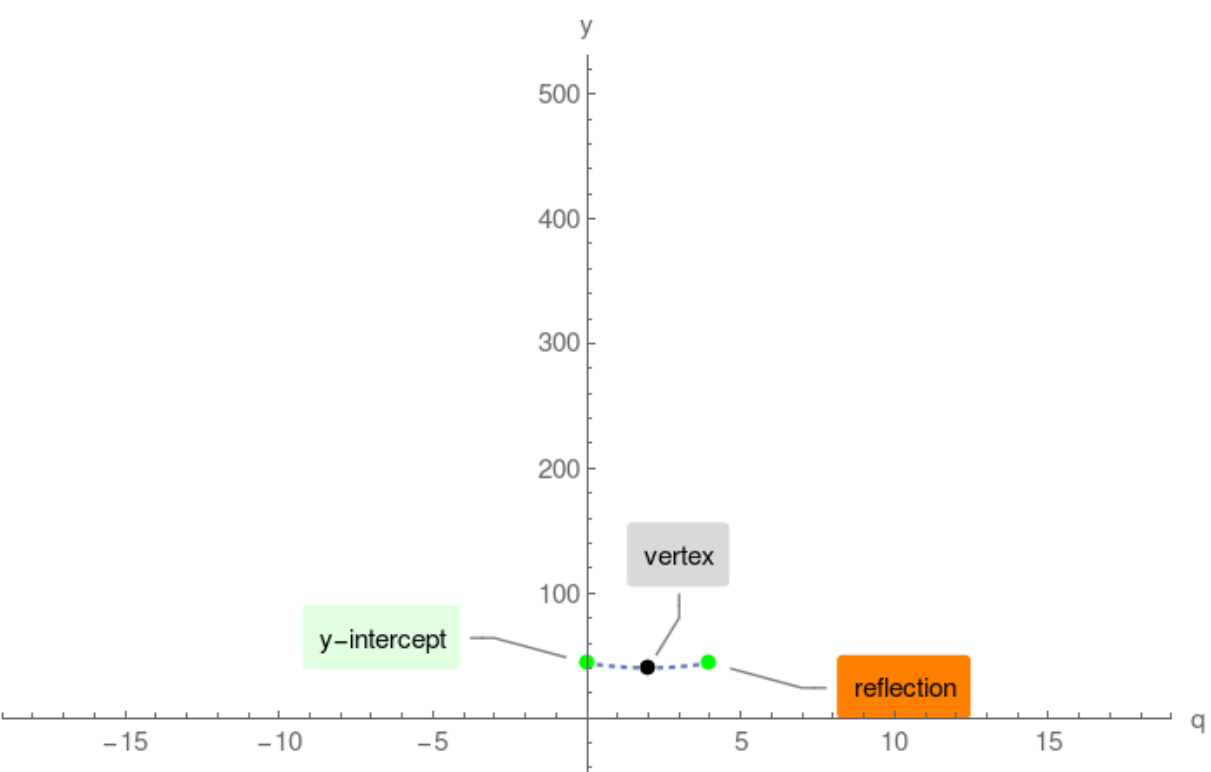
Compute y-intercept reflected against vertex,

reflection = (4, 44)



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

