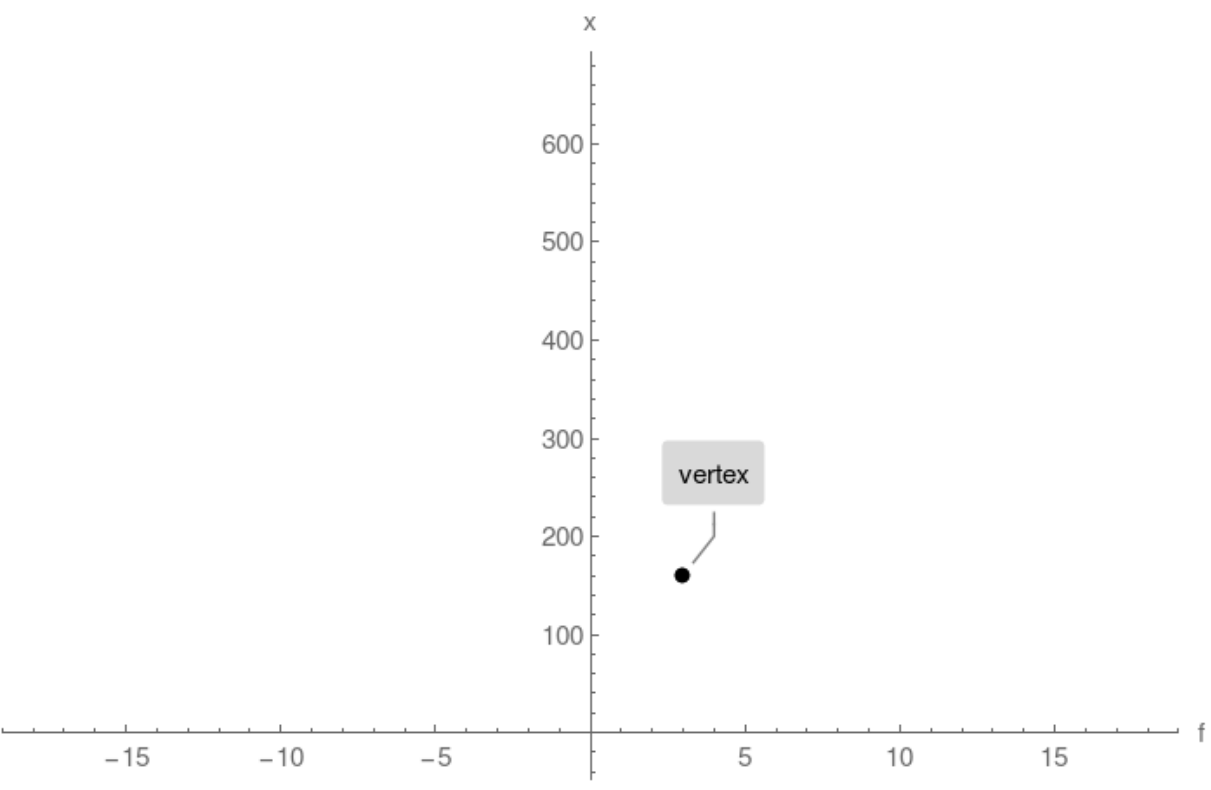
Example 2. No horizontal intercepts found

Plot $x(f) = f^2 - 6f + 169$

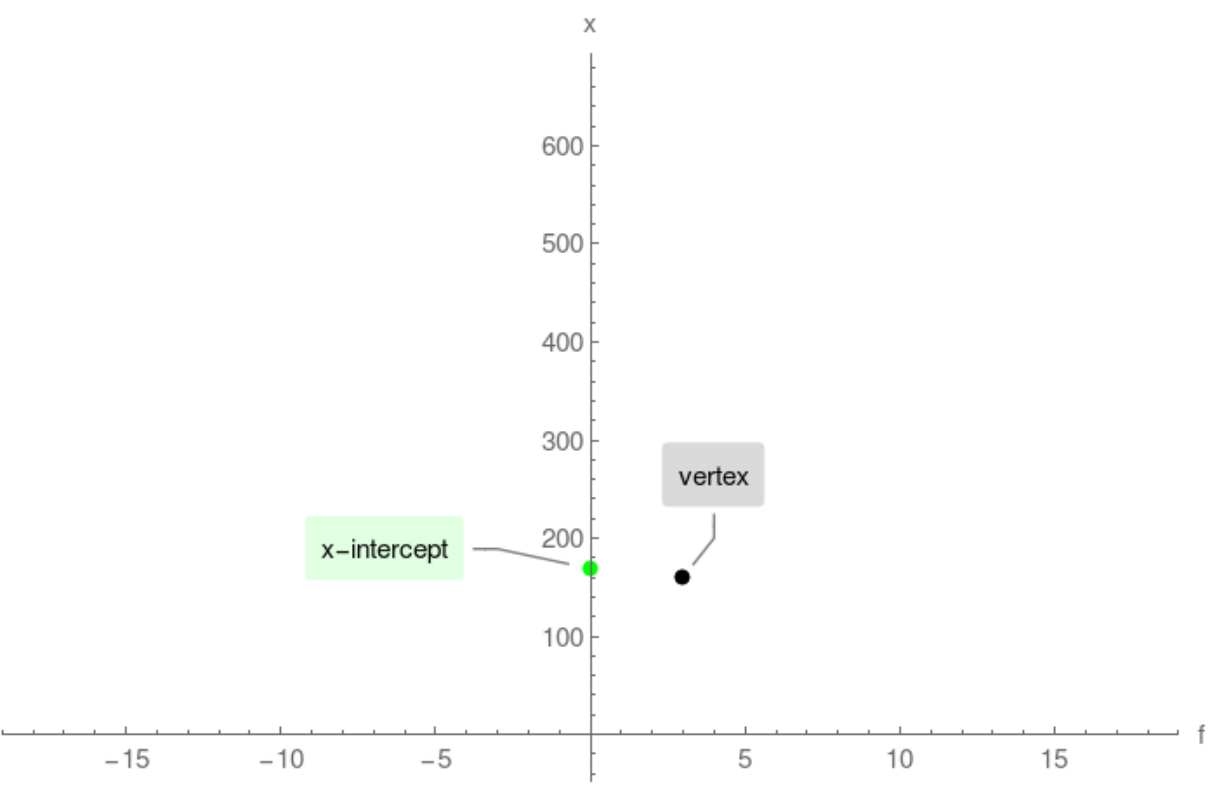
Step 1.

Compute vertex and plot single point:
vertex = (3,160)



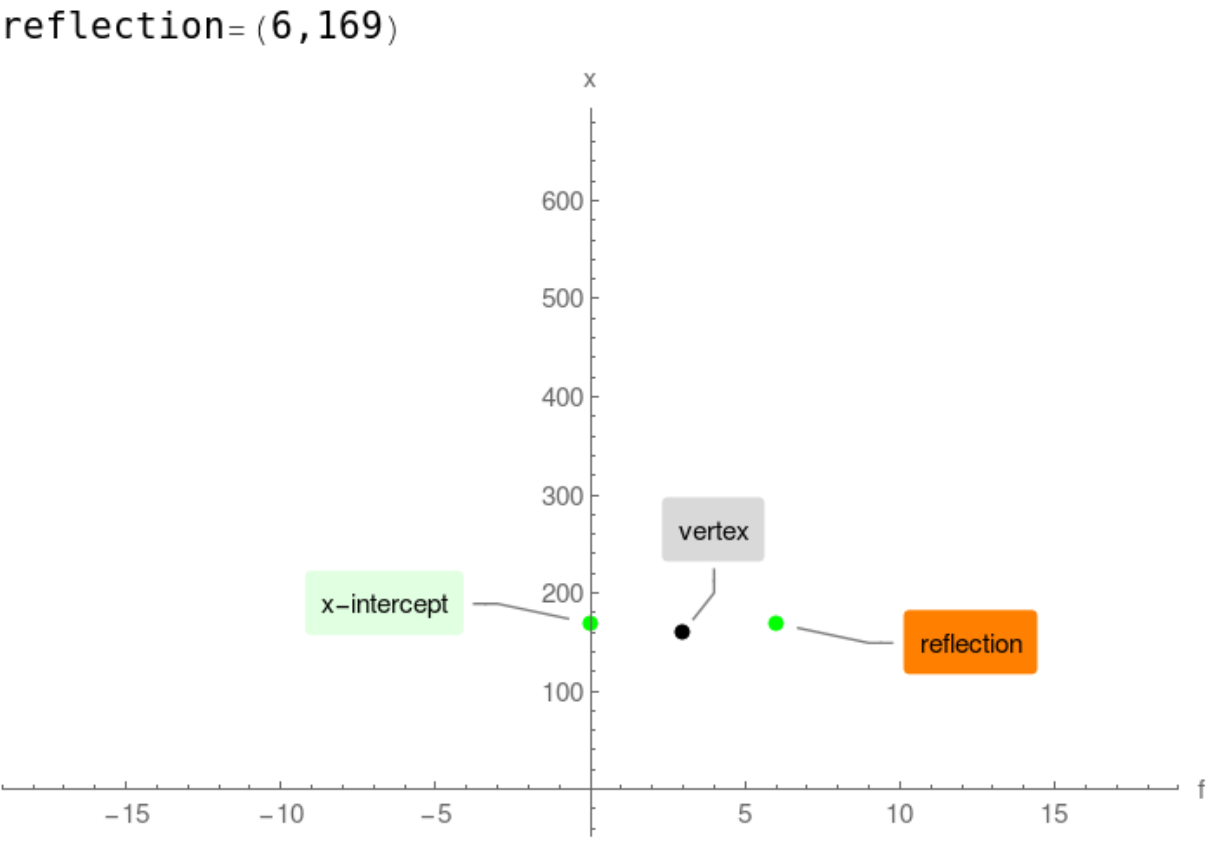
Step 2.

Compute x-intercept and plot single point:
x-intercept = (0,169)



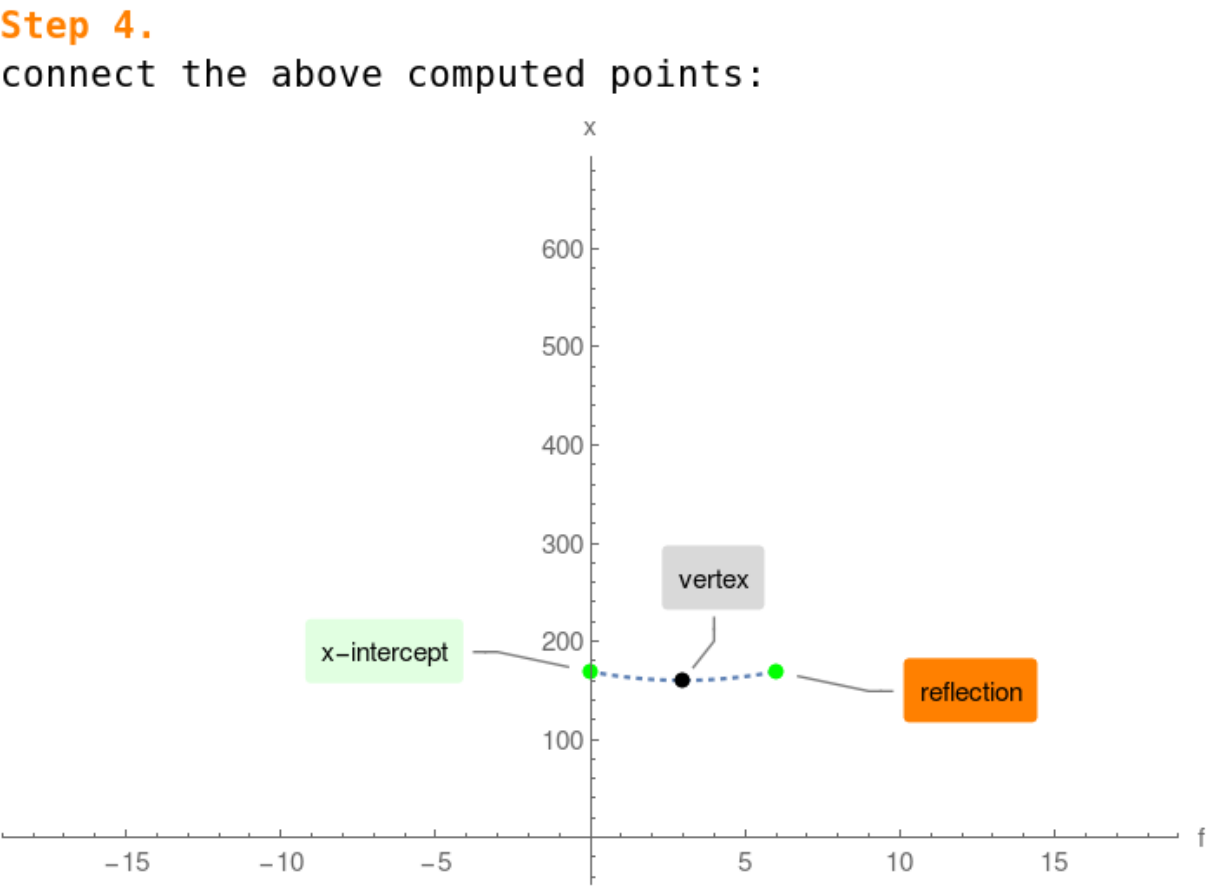
Step 3.

Compute x-intercept reflected against vertex,
reflection = (6,169)



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts