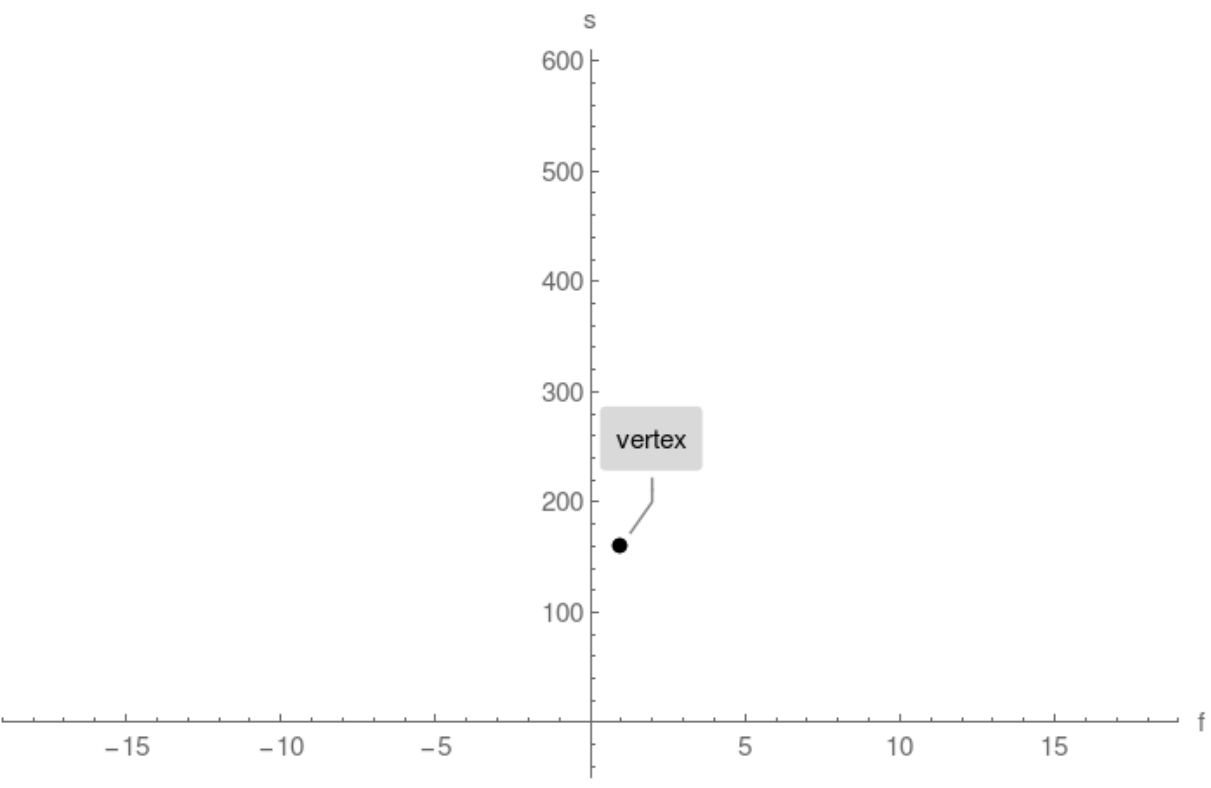
Example 2. No horizontal intercepts found

Plot $s(f) = f^2 - 2f + 161$

Step 1.

Compute vertex and plot single point:

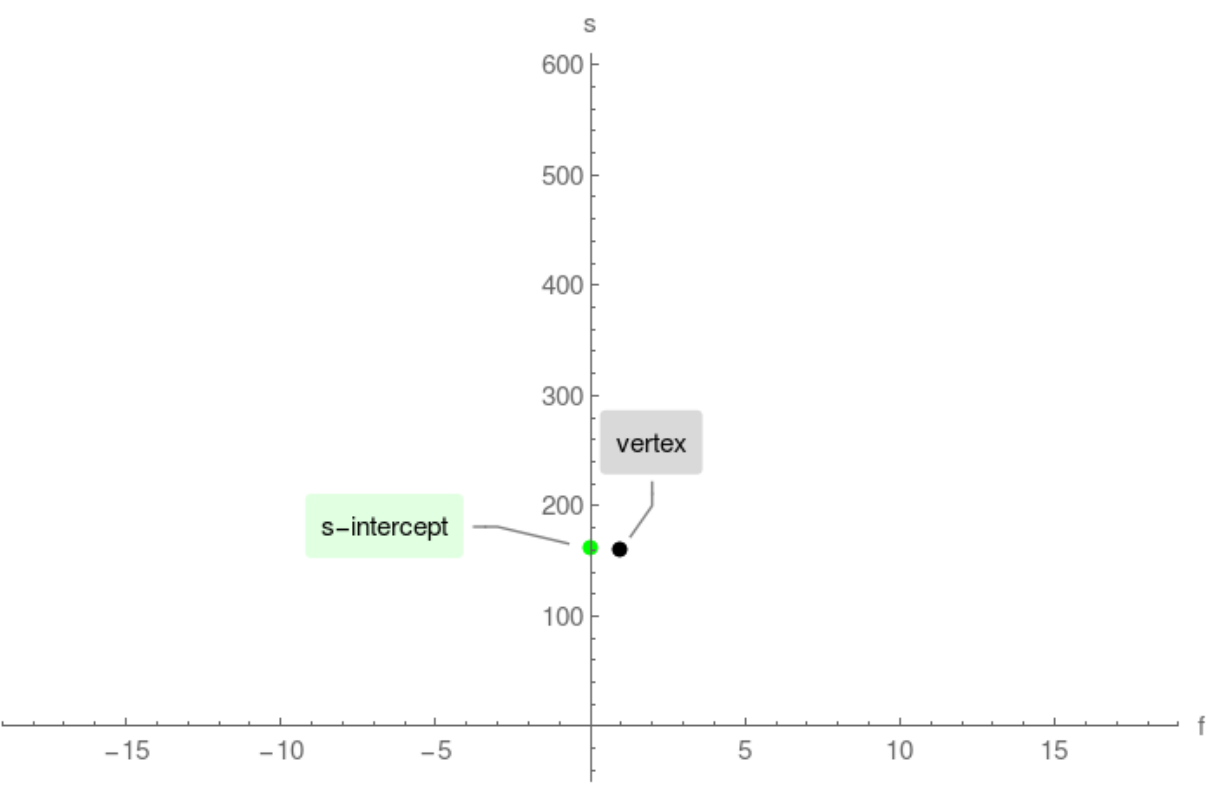
vertex = (1,160)



Step 2.

Compute s-intercept and plot single point:

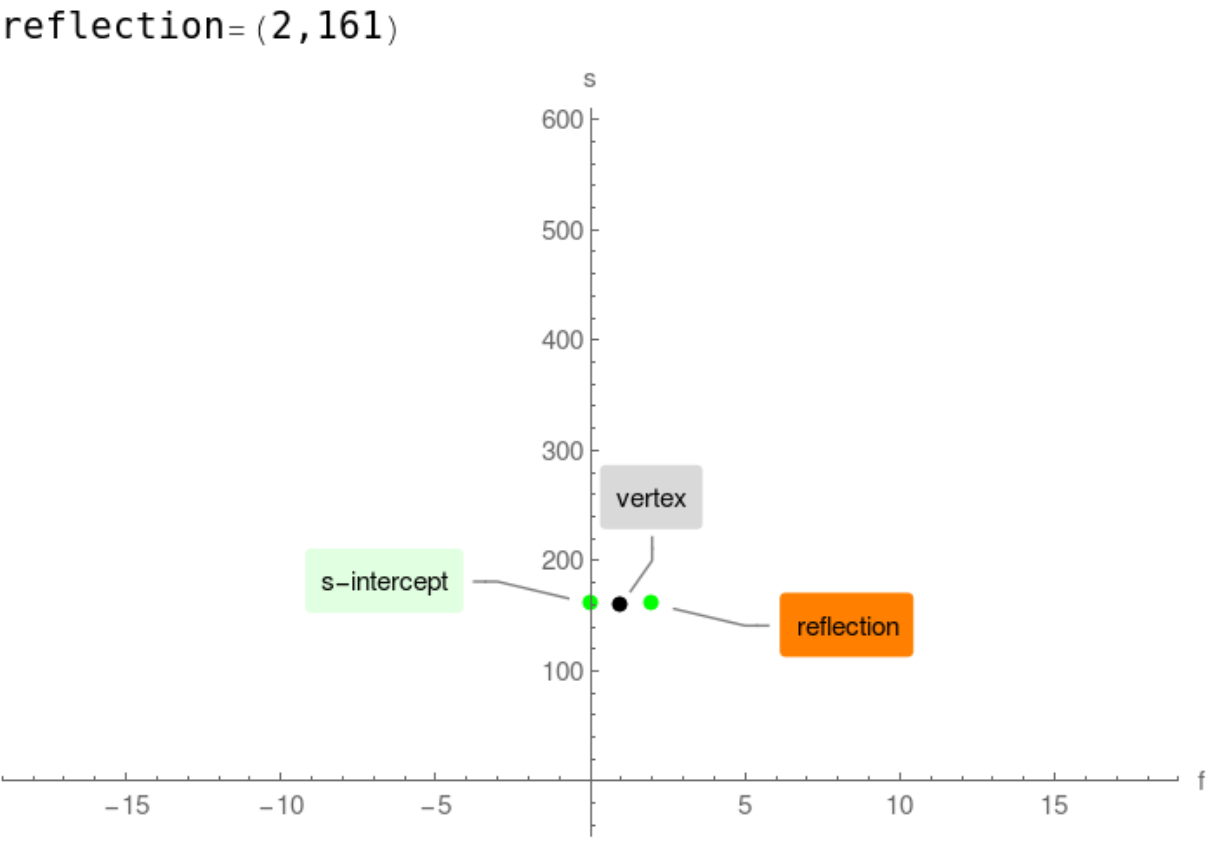
s-intercept = (0,161)



Step 3.

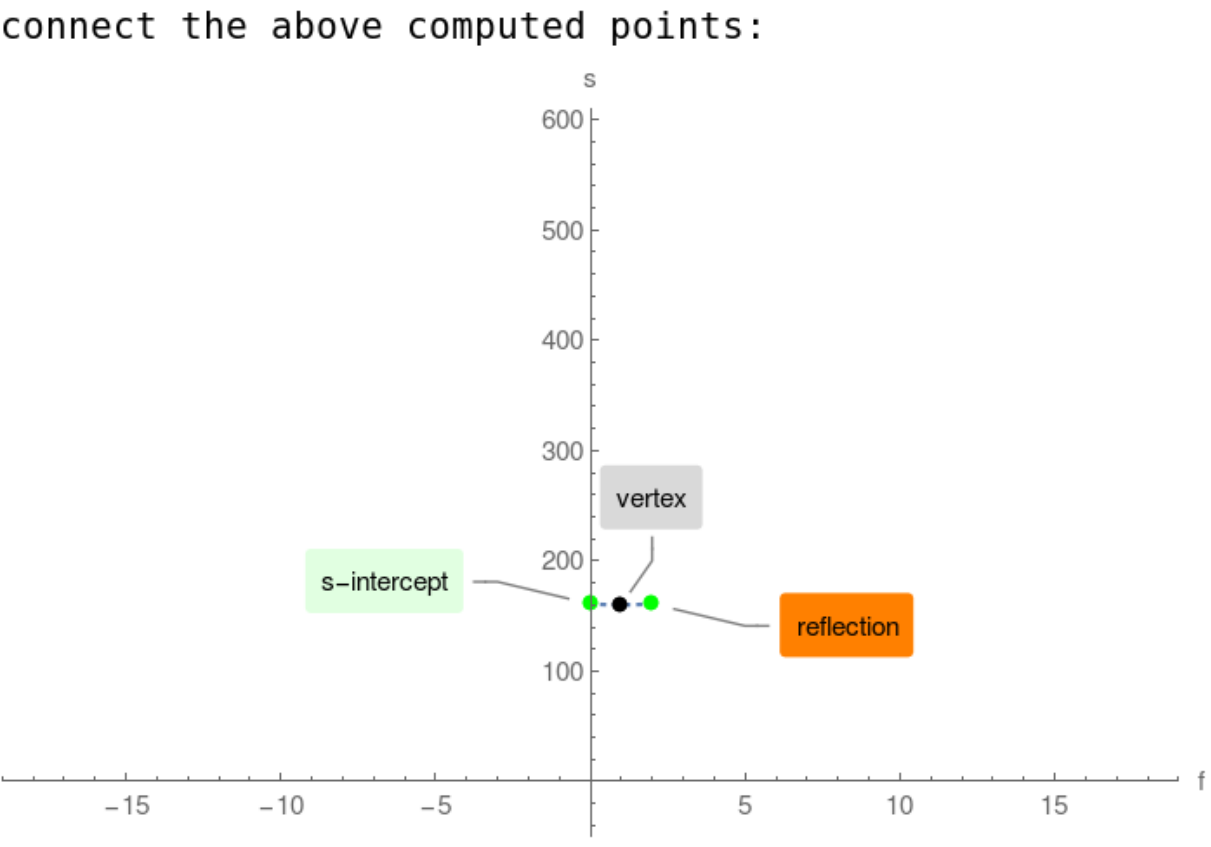
Compute s-intercept reflected against vertex,

reflection = (2,161)



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts