

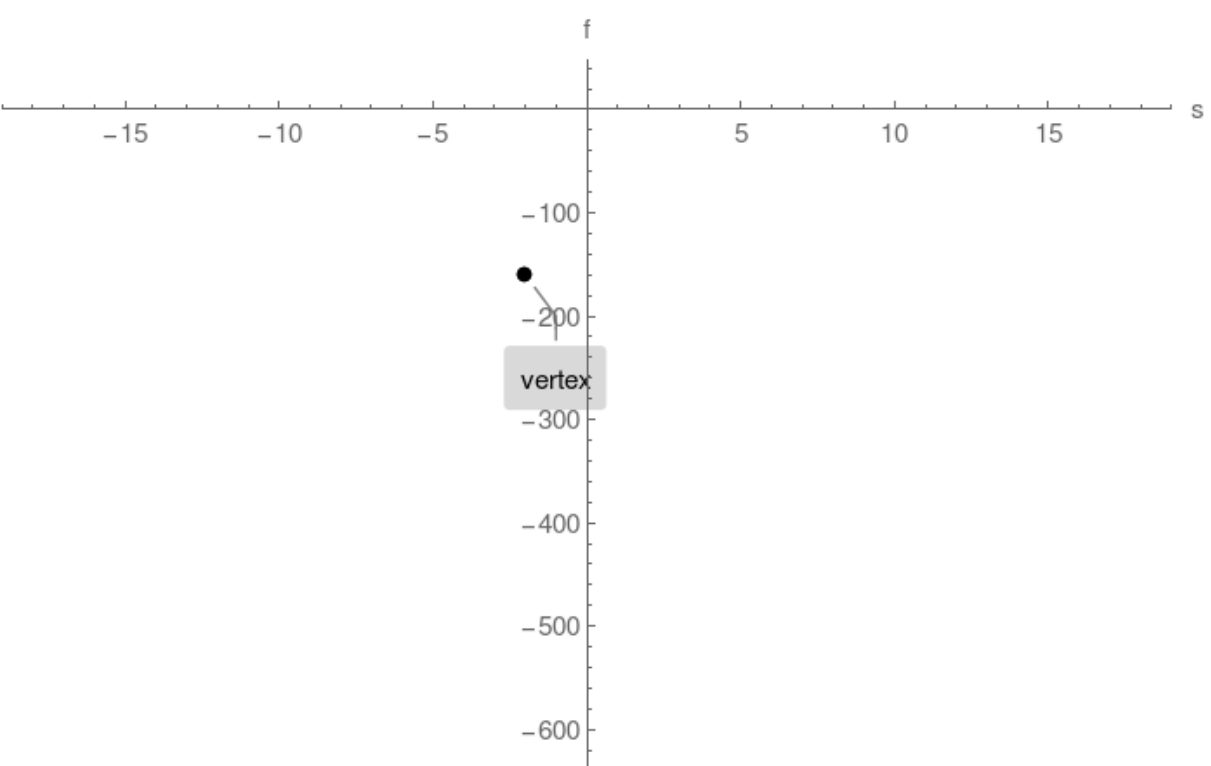
Example 2. No horizontal intercepts found

Plot $f(s) = -s^2 - 4s - 164$

Step 1.

Compute vertex and plot single point:

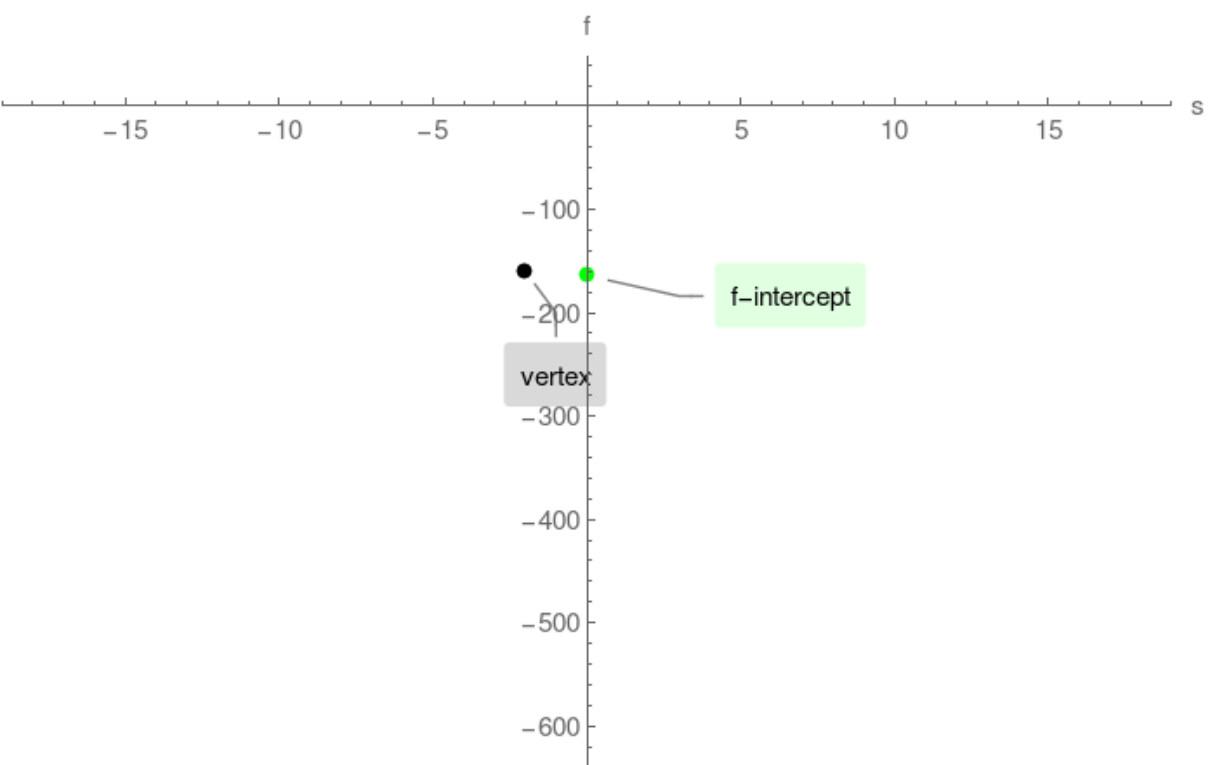
vertex = $(-2, -160)$



Step 2.

Compute f-intercept and plot single point:

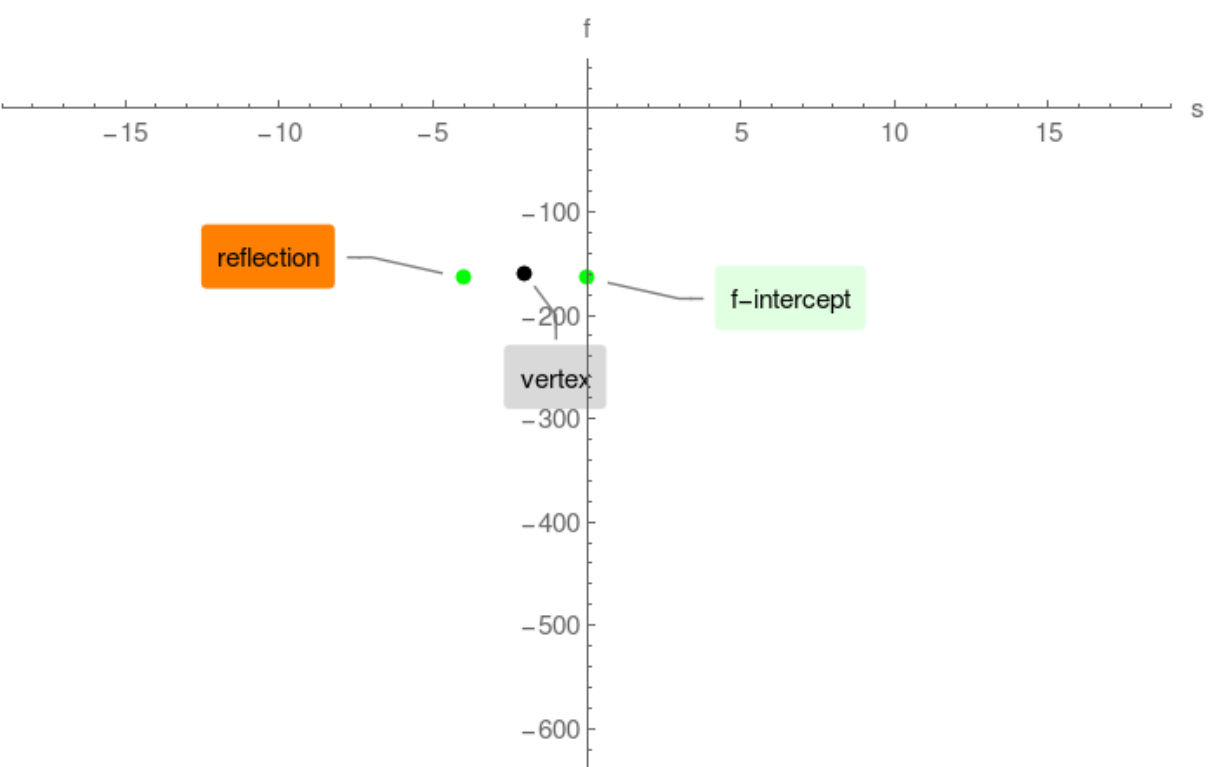
f-intercept = $(0, -164)$



Step 3.

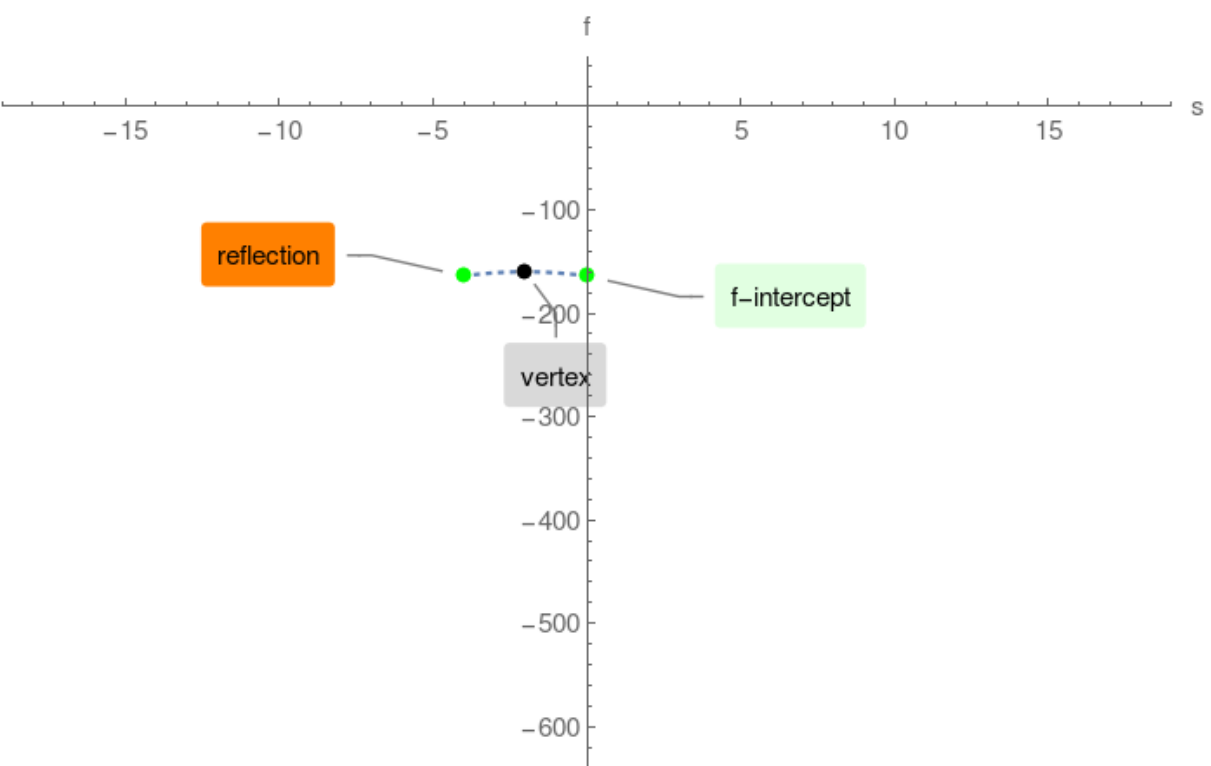
Compute f-intercept reflected against vertex,

reflection = $(-4, -164)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

