

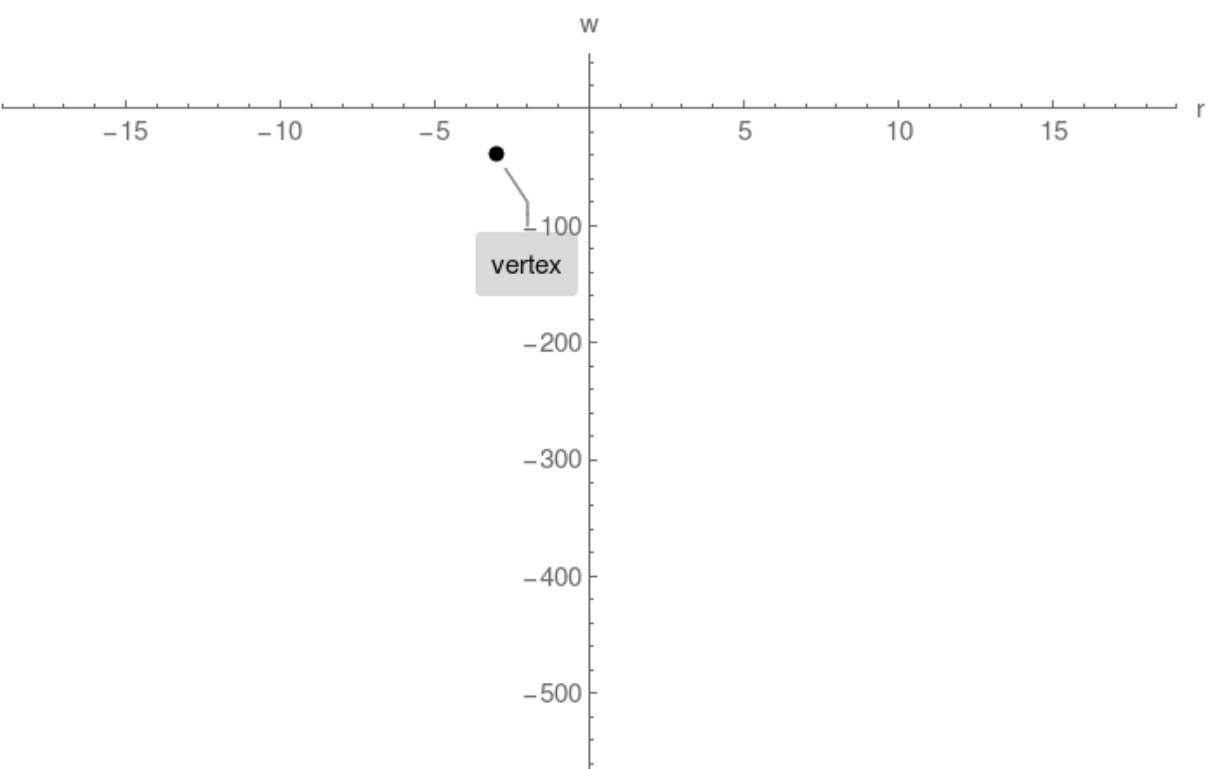
Example 2. No horizontal intercepts found

Plot $w(r) = -r^2 - 6r - 49$

Step 1.

Compute vertex and plot single point:

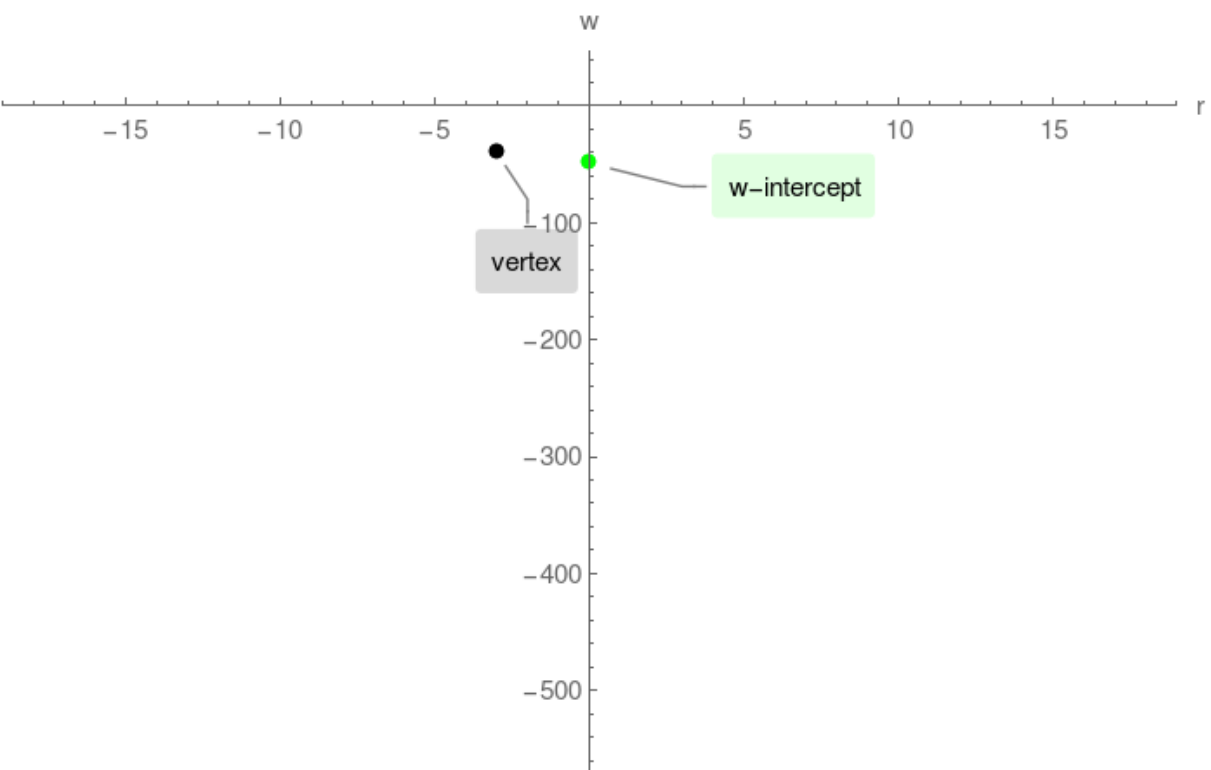
vertex = $(-3, -40)$



Step 2.

Compute w-intercept and plot single point:

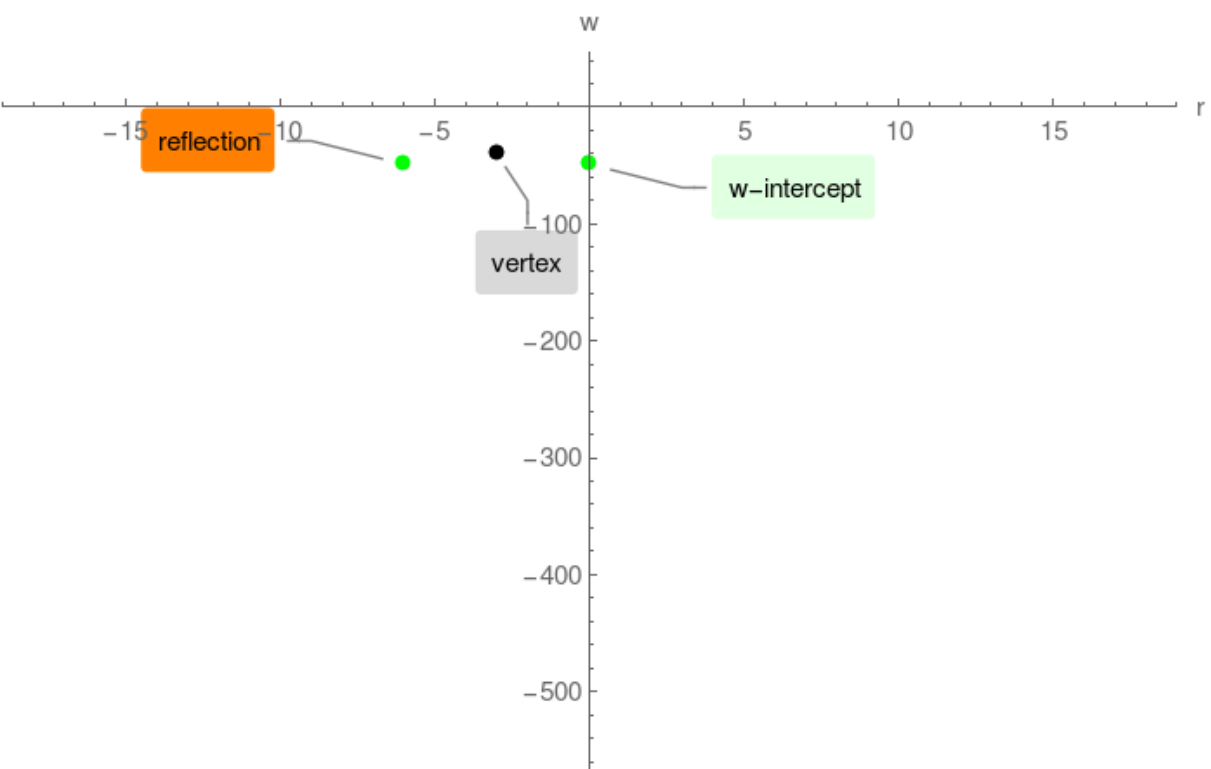
w-intercept = $(0, -49)$



Step 3.

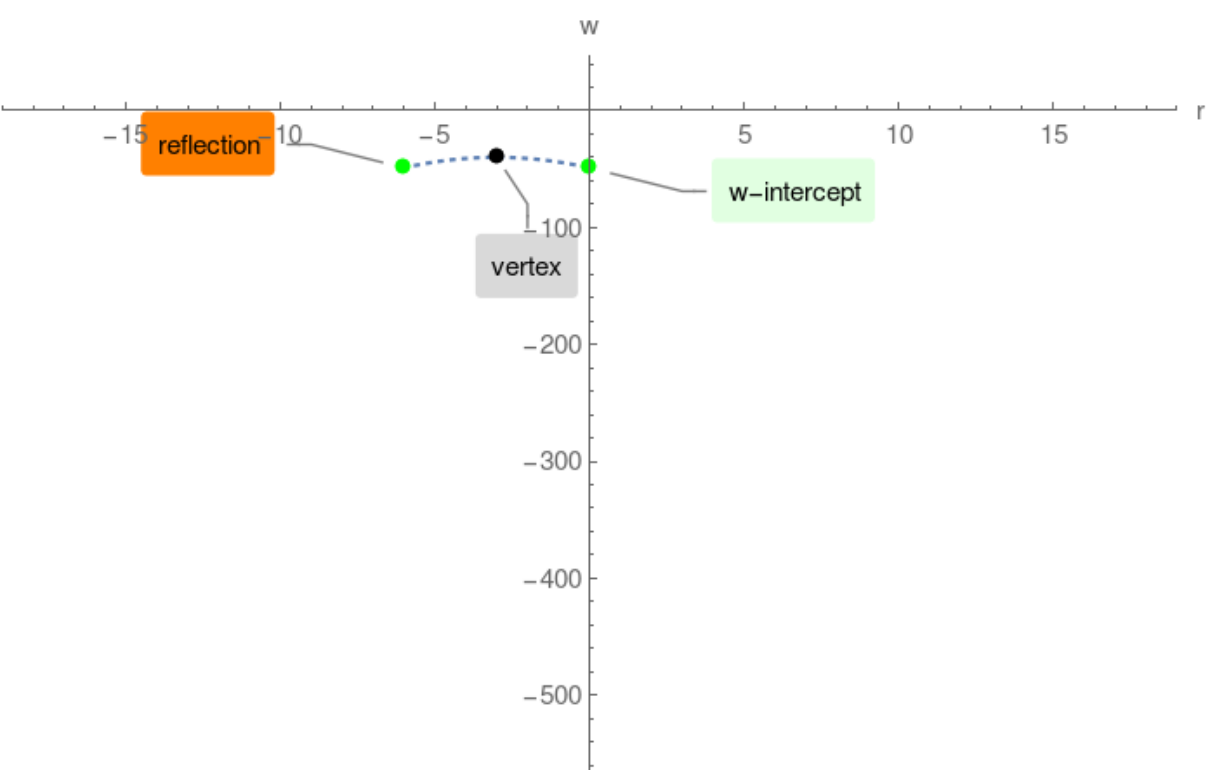
Compute w-intercept reflected against vertex,

reflection = $(-6, -49)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

