

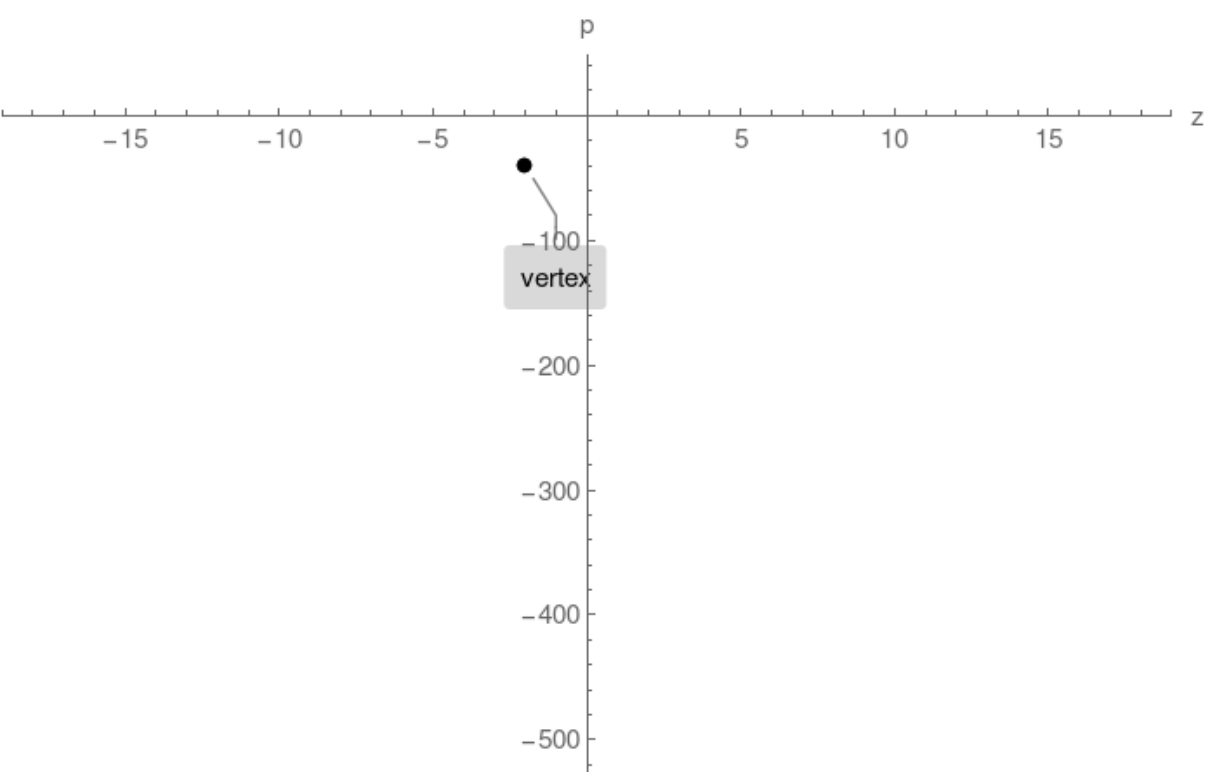
Example 2. No horizontal intercepts found

Plot $p(z) = -z^2 - 4z - 44$

Step 1.

Compute vertex and plot single point:

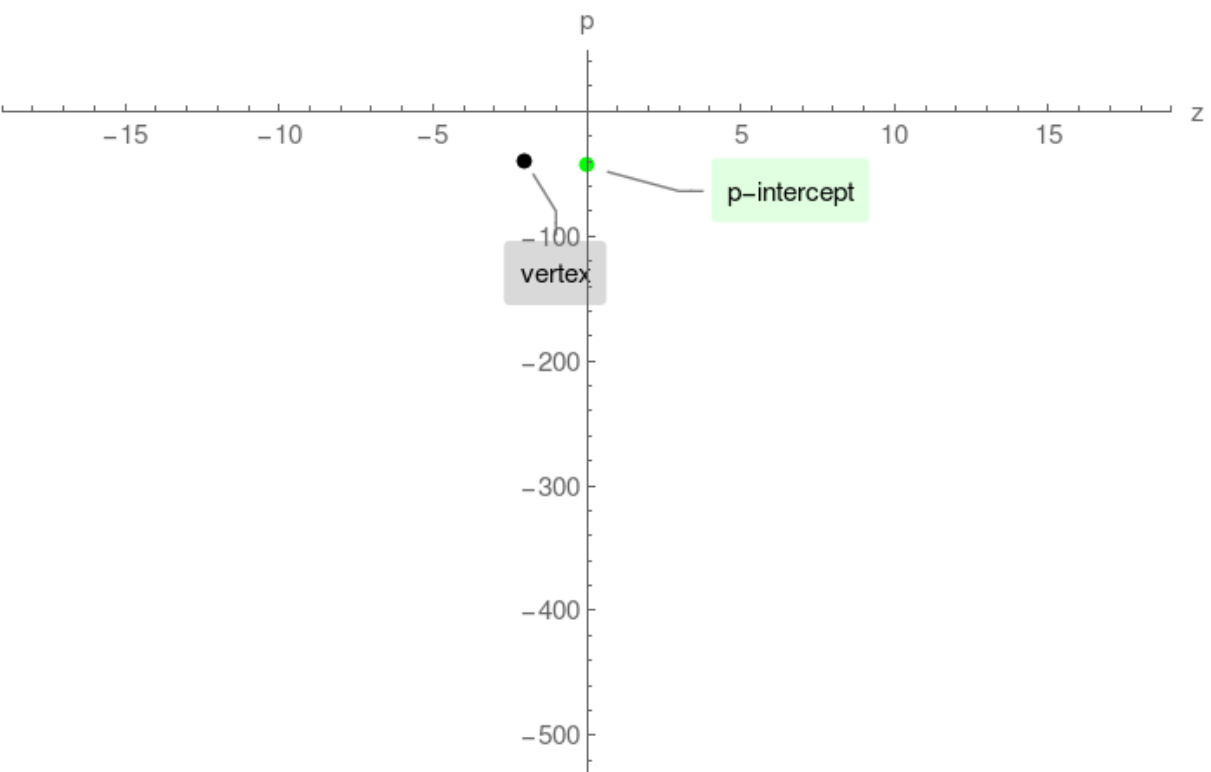
vertex = $(-2, -40)$



Step 2.

Compute p-intercept and plot single point:

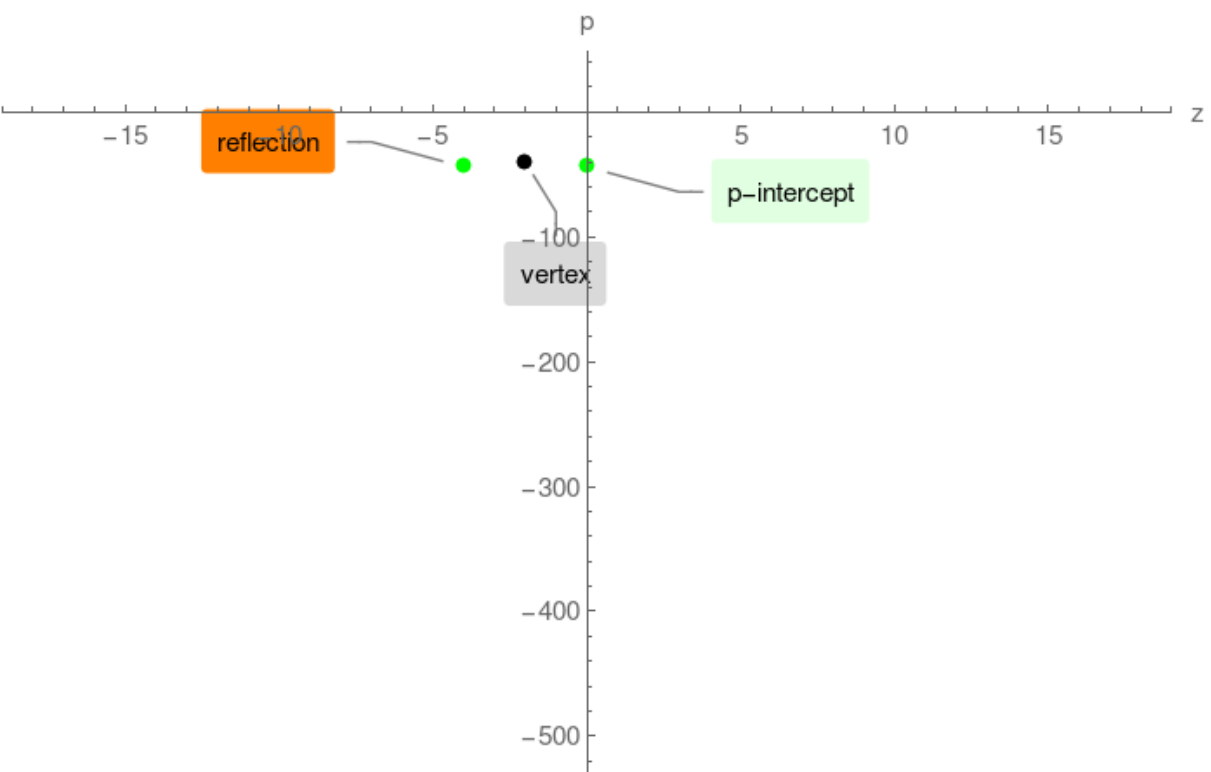
p-intercept = $(0, -44)$



Step 3.

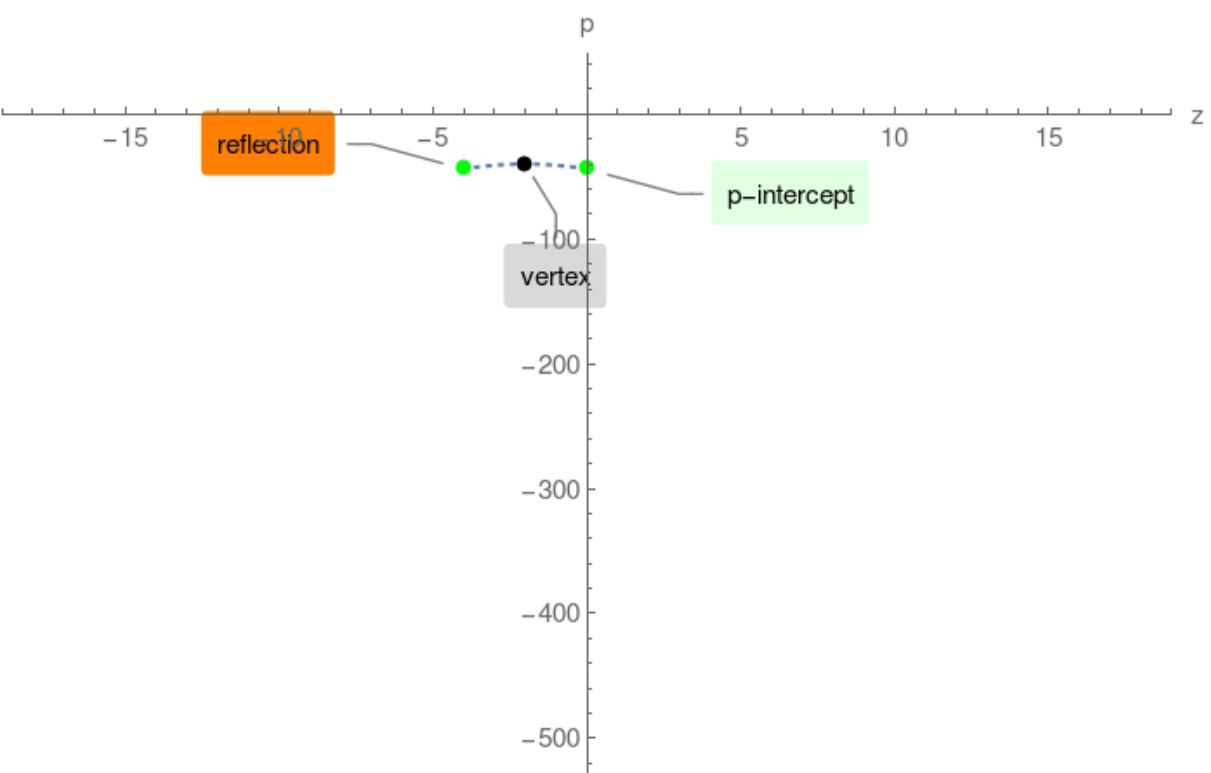
Compute p-intercept reflected against vertex,

reflection = $(-4, -44)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

