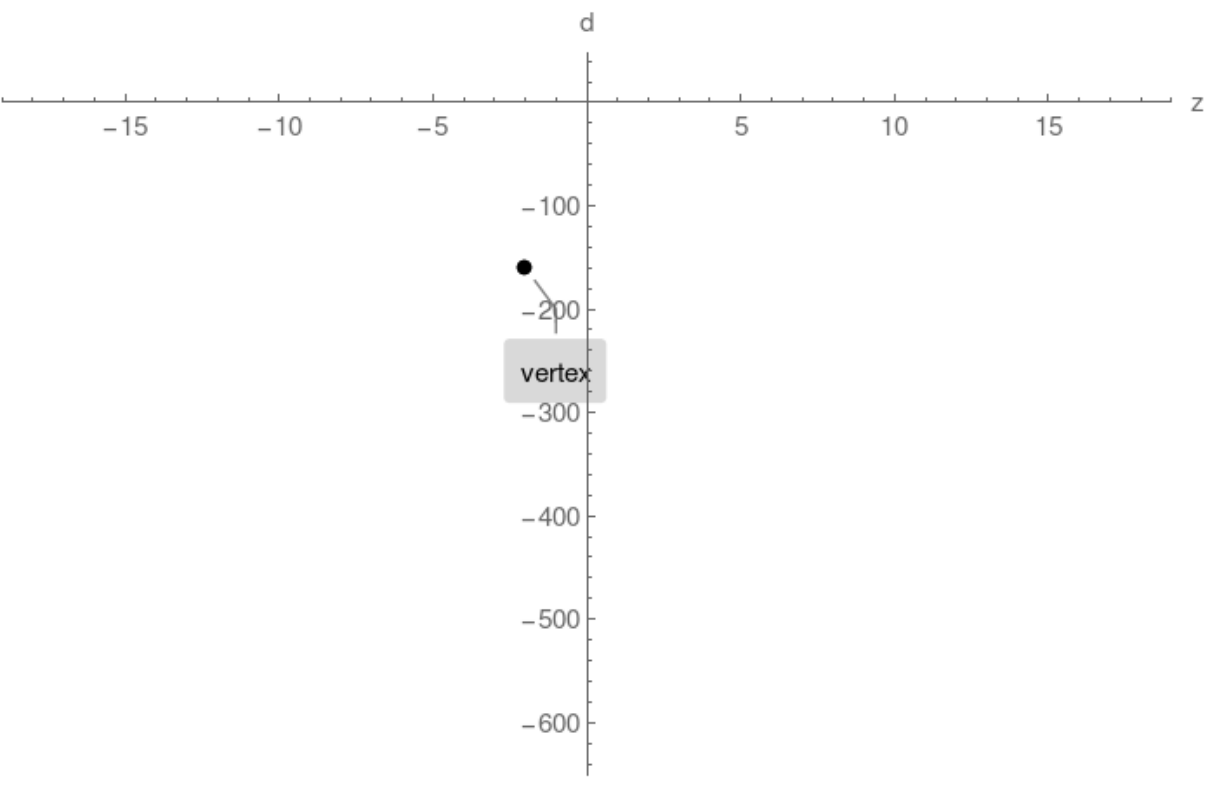
Example 2. No horizontal intercepts found

Plot $d(z) = -z^2 - 4z - 164$

Step 1.

Compute vertex and plot single point:

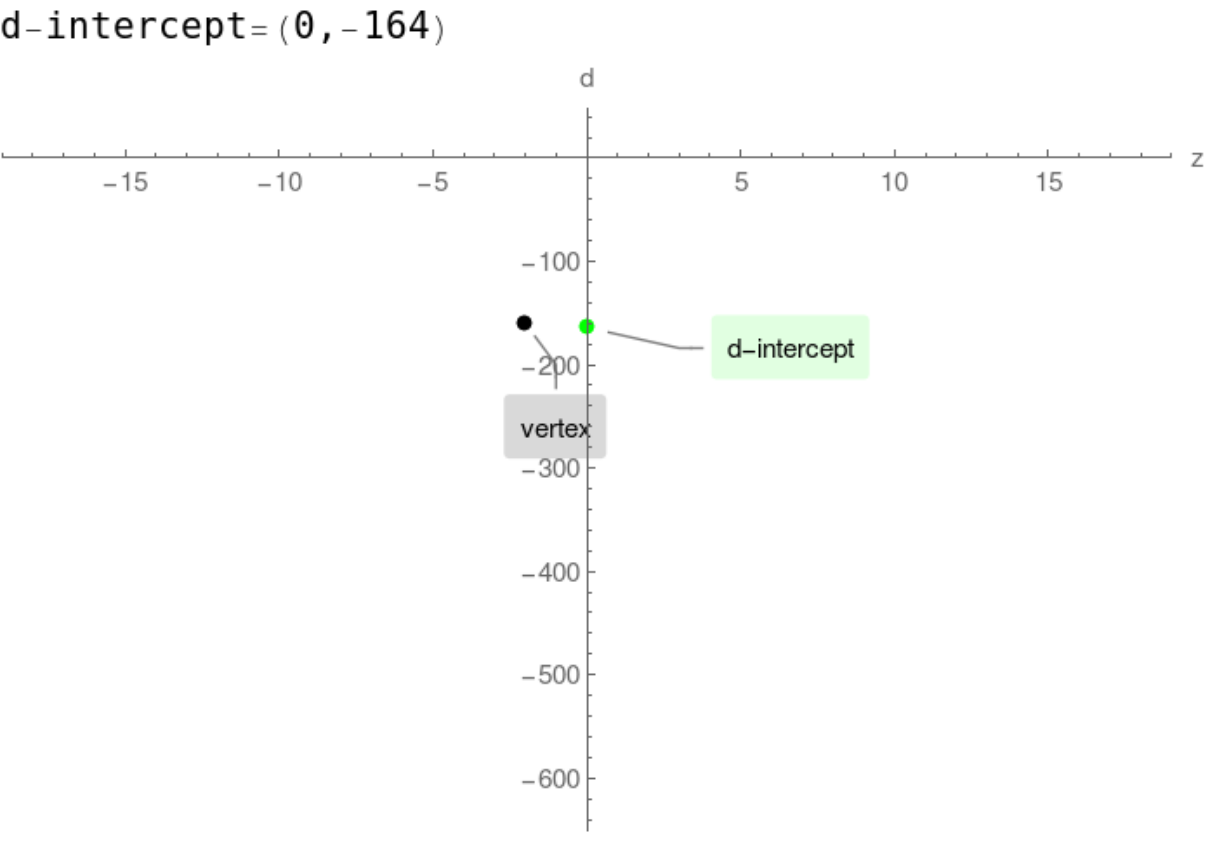
vertex$= (-2, -160)$



Step 2.

Compute d-intercept and plot single point:

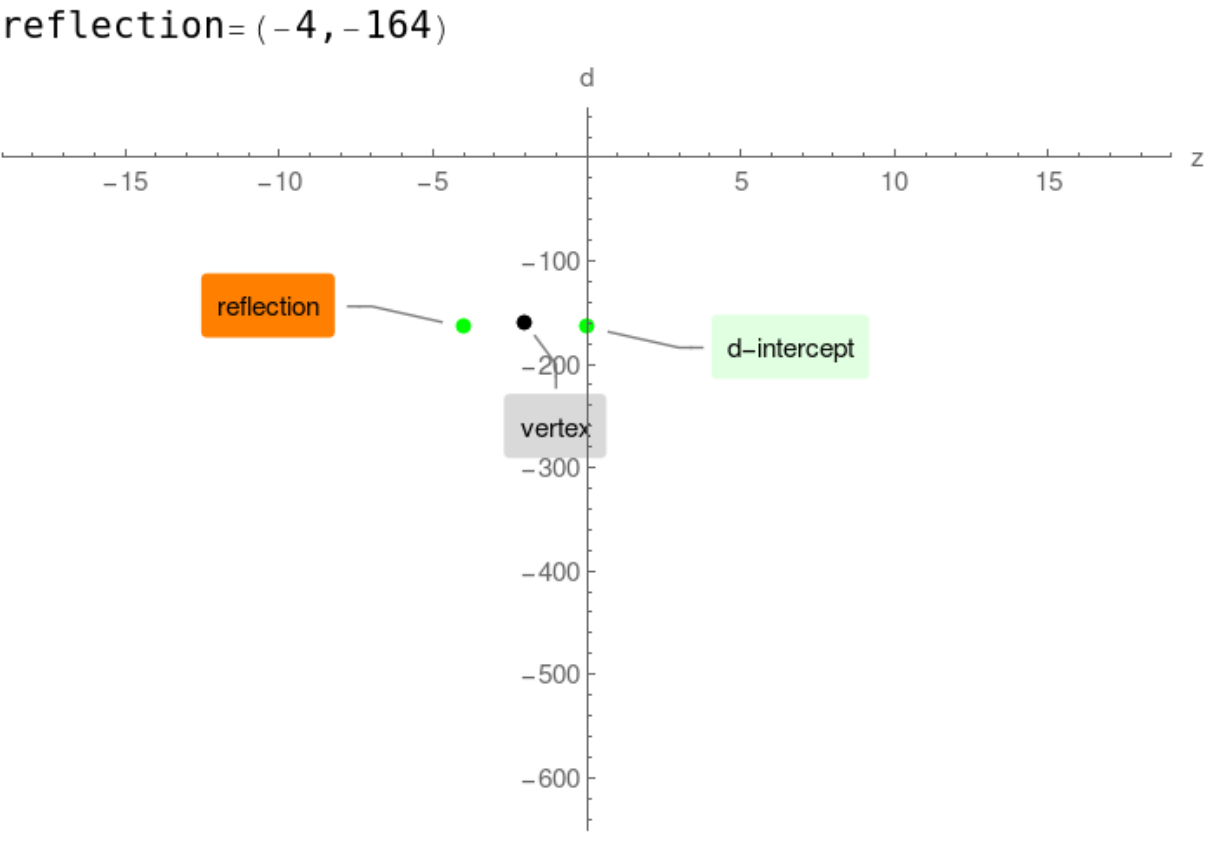
d-intercept$= (0, -164)$



Step 3.

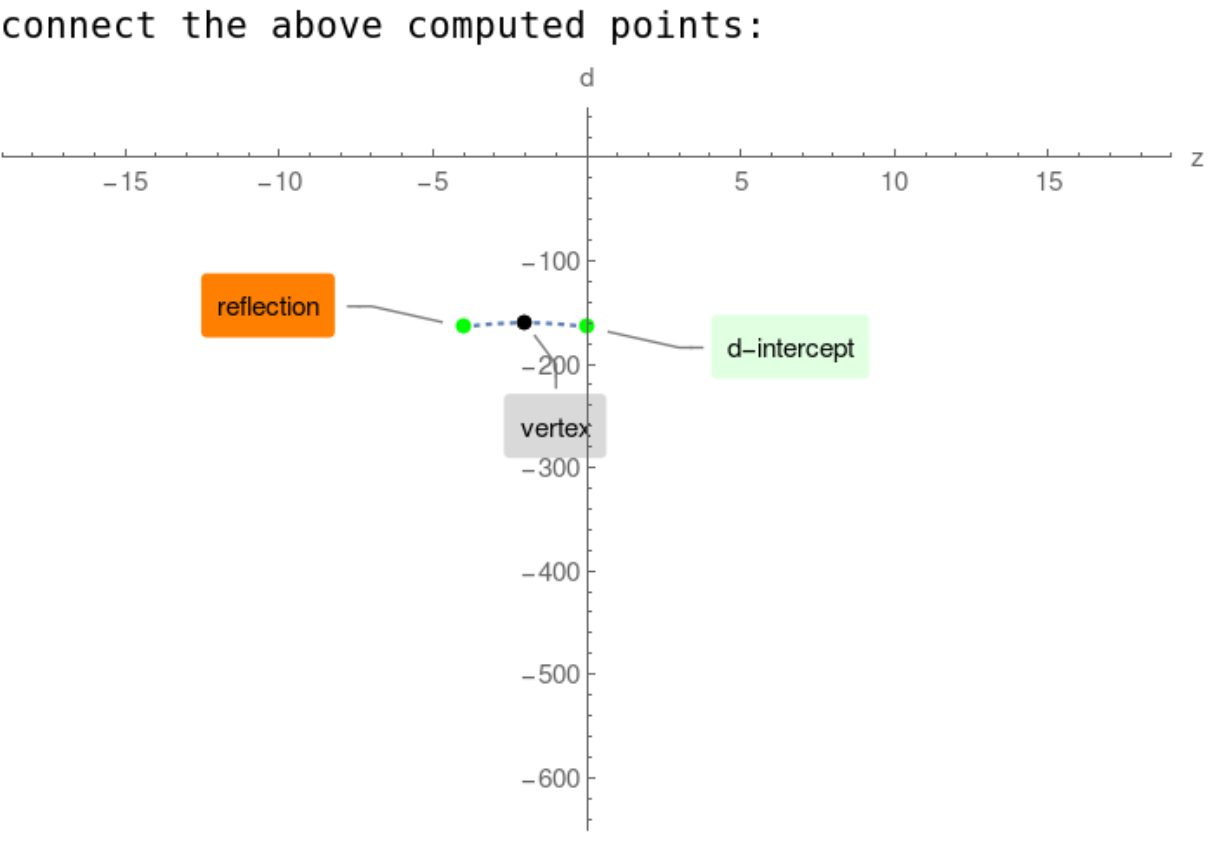
Compute d-intercept reflected against vertex,

reflection$= (-4, -164)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts