

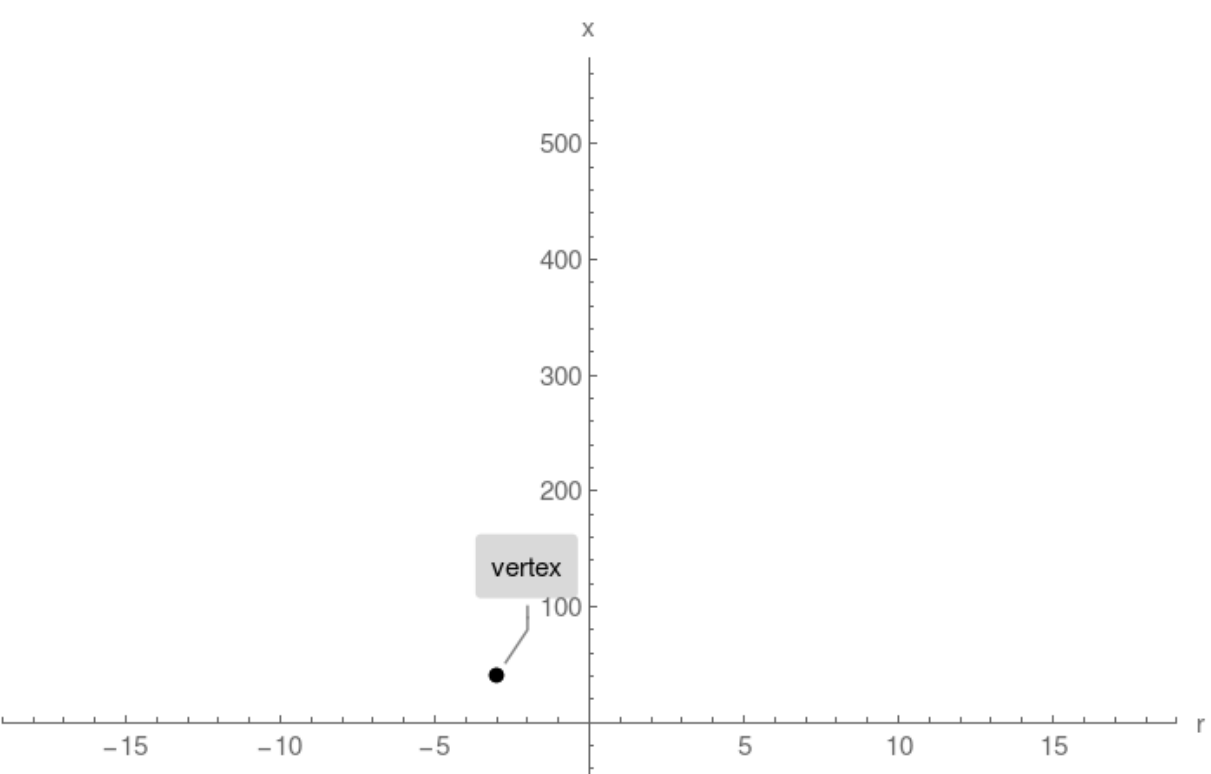
Example 2. No horizontal intercepts found

Plot $x(r) = r^2 + 6r + 49$

Step 1.

Compute vertex and plot single point:

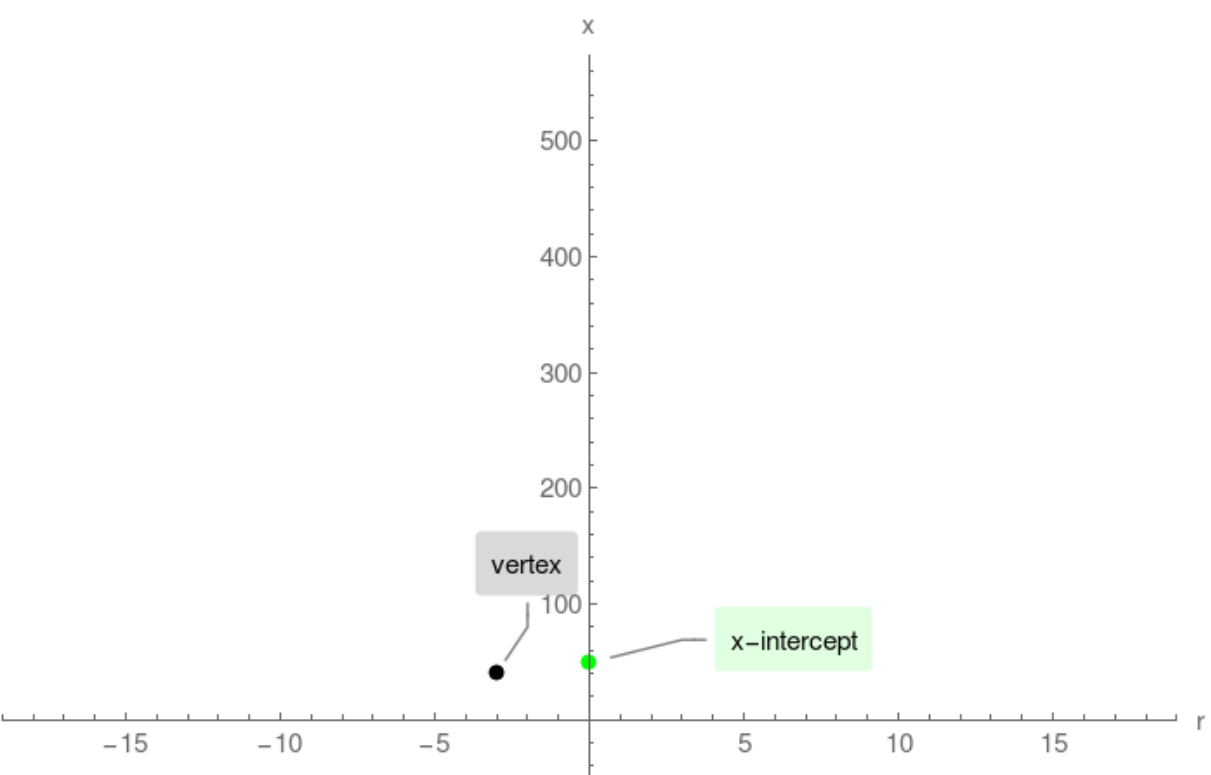
vertex = $(-3, 40)$



Step 2.

Compute x-intercept and plot single point:

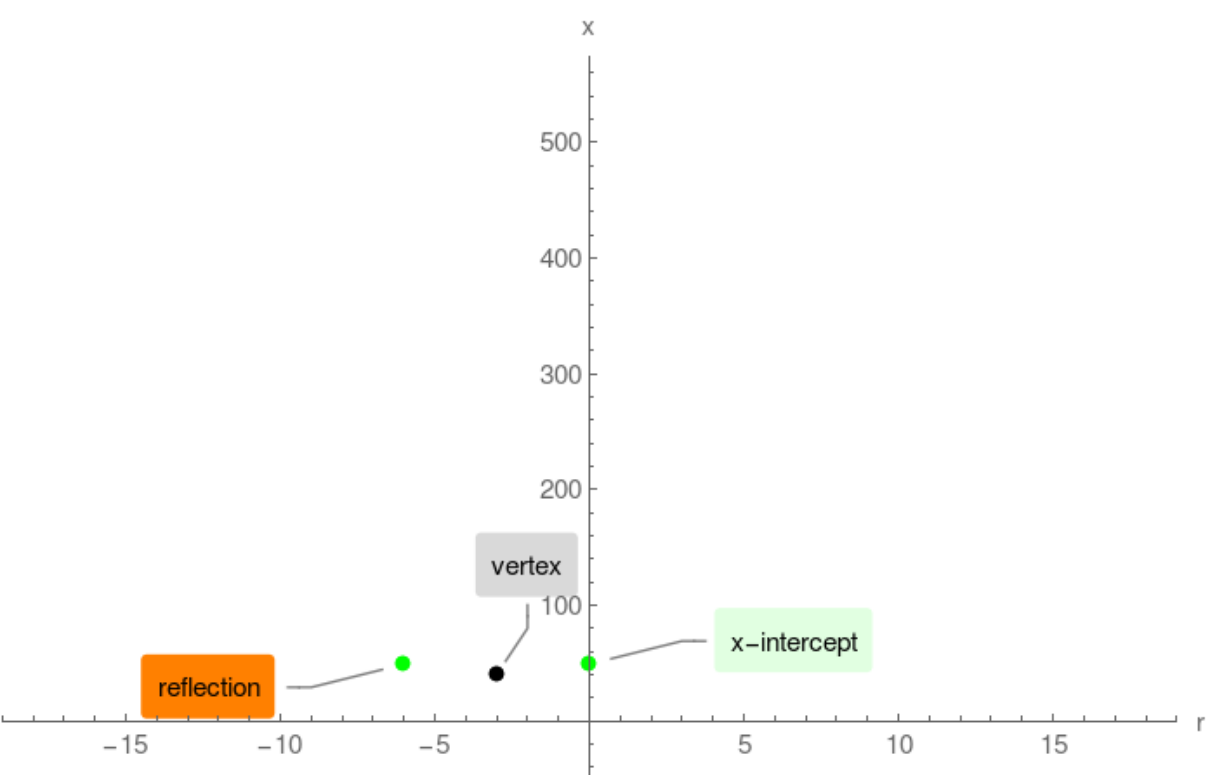
x-intercept = $(0, 49)$



Step 3.

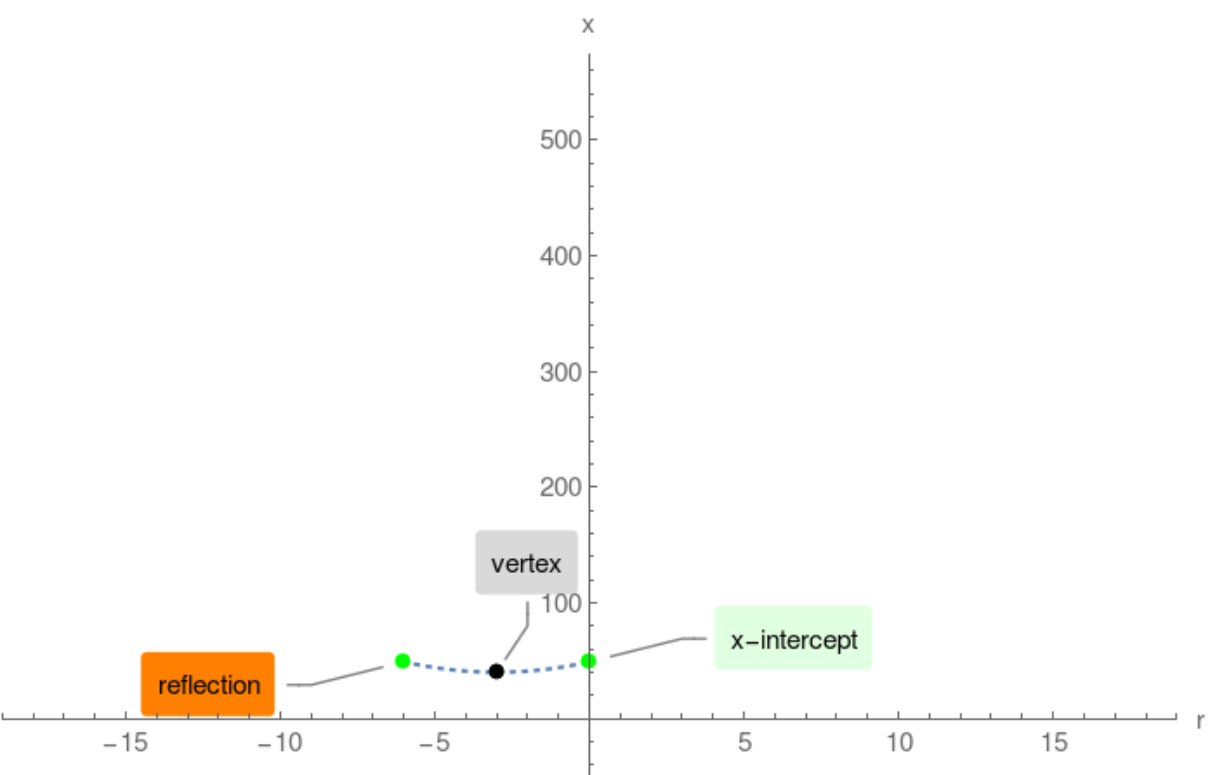
Compute x-intercept reflected against vertex,

reflection = $(-6, 49)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

