

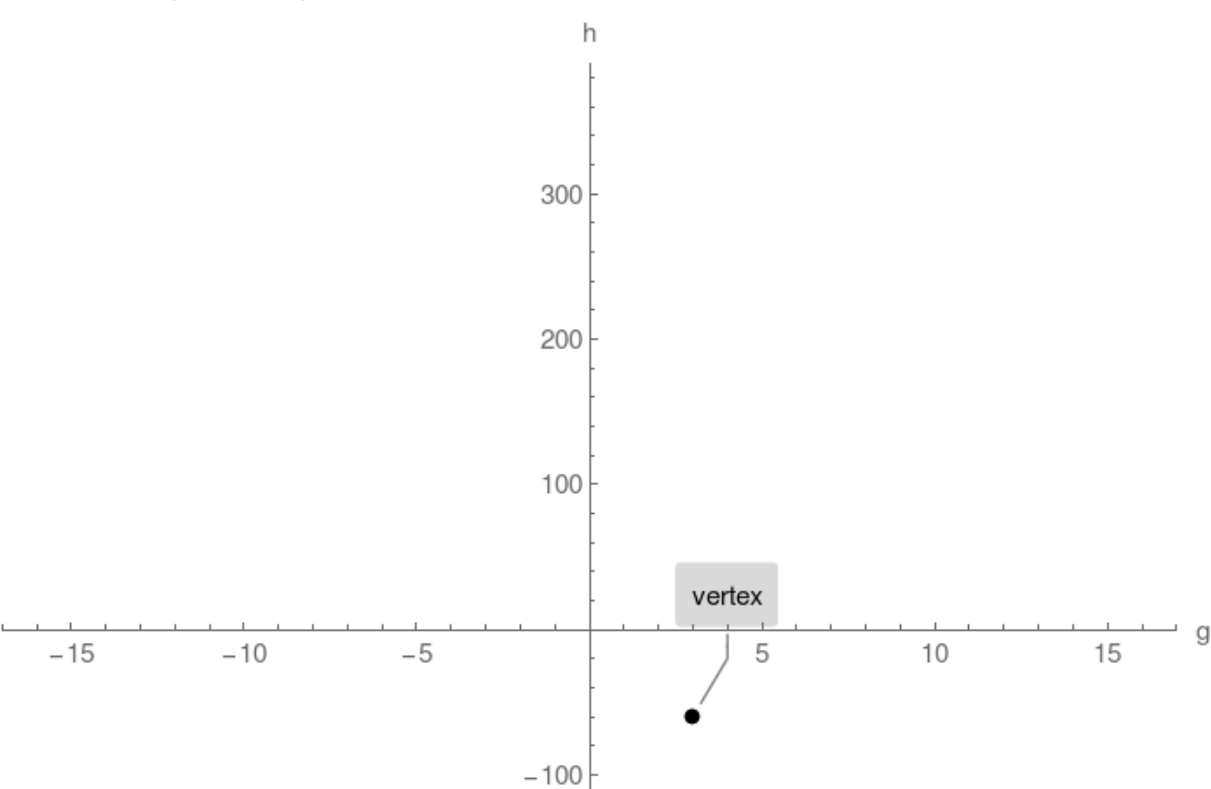
Example 1. 2 horizontal intercepts found

Plot $h(g) = g^2 - 6g - 51$

Step 1.

Compute vertex and plot single point:

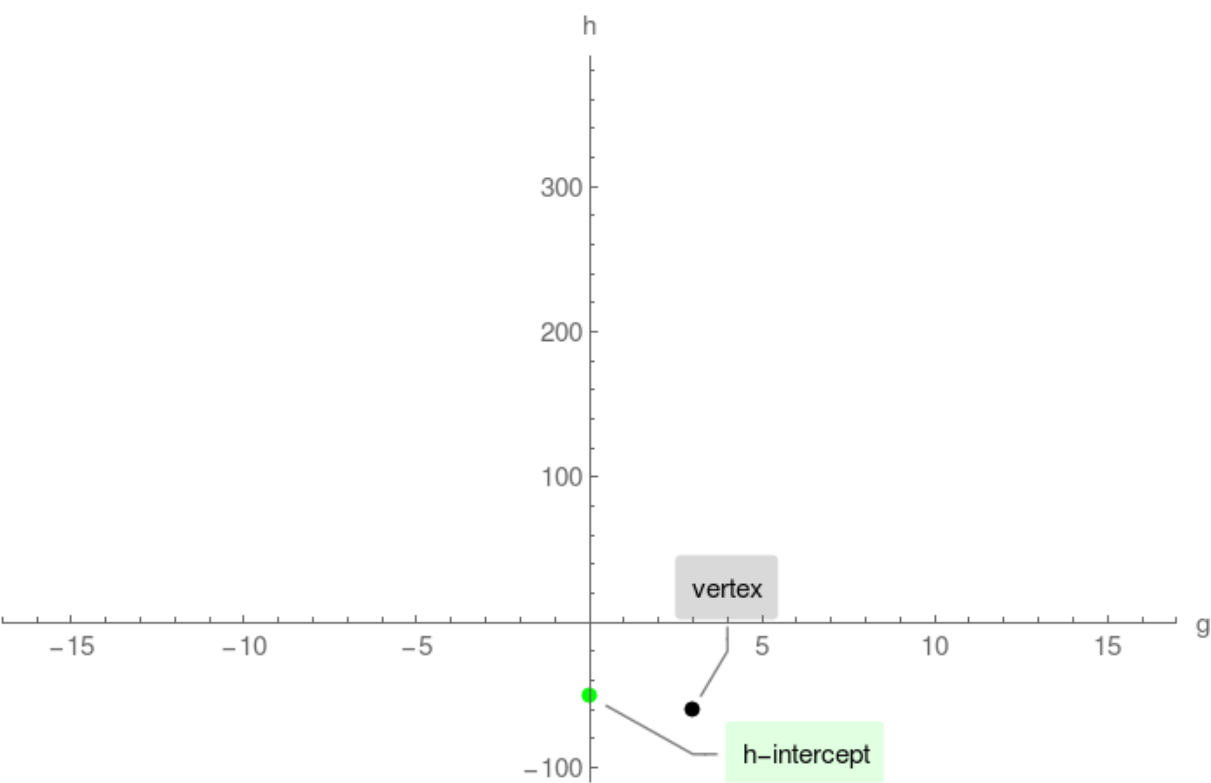
vertex = $(3, -60)$



Step 2.

Compute h-intercept and plot single point:

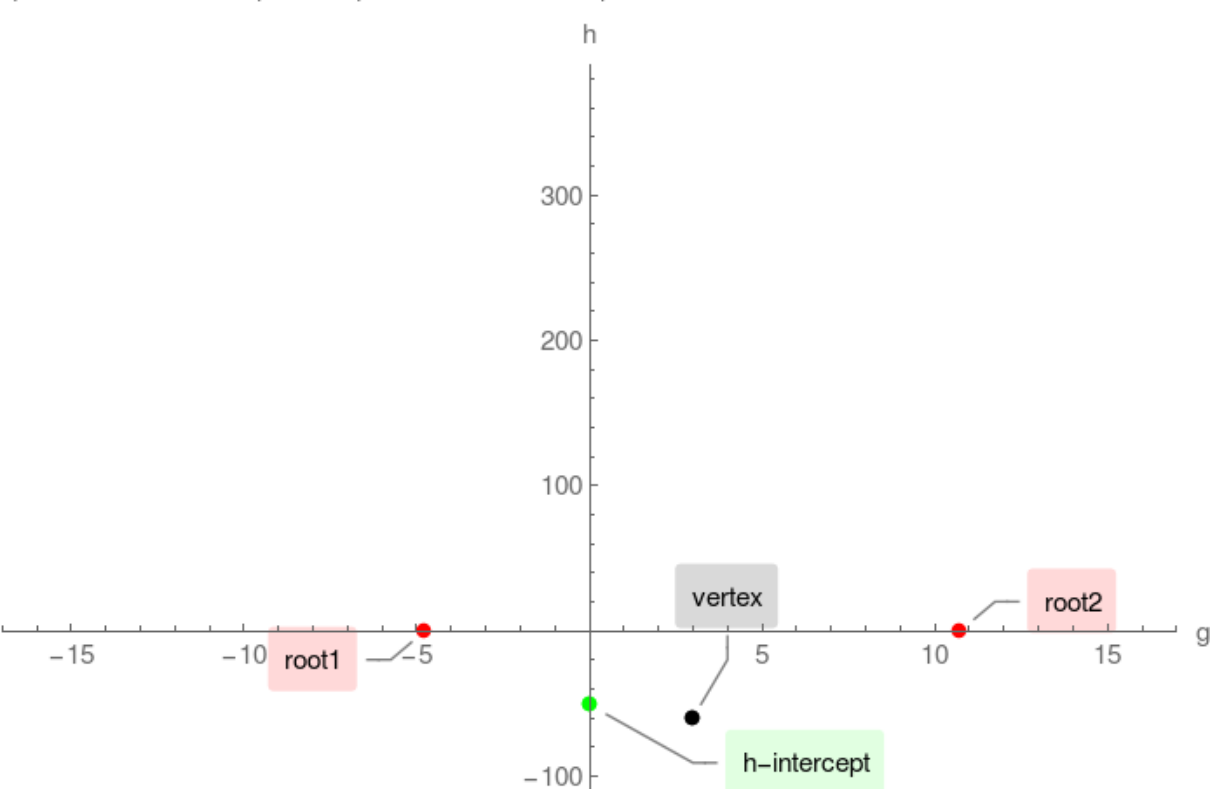
h-intercept = $(0, -51)$



Step 3.

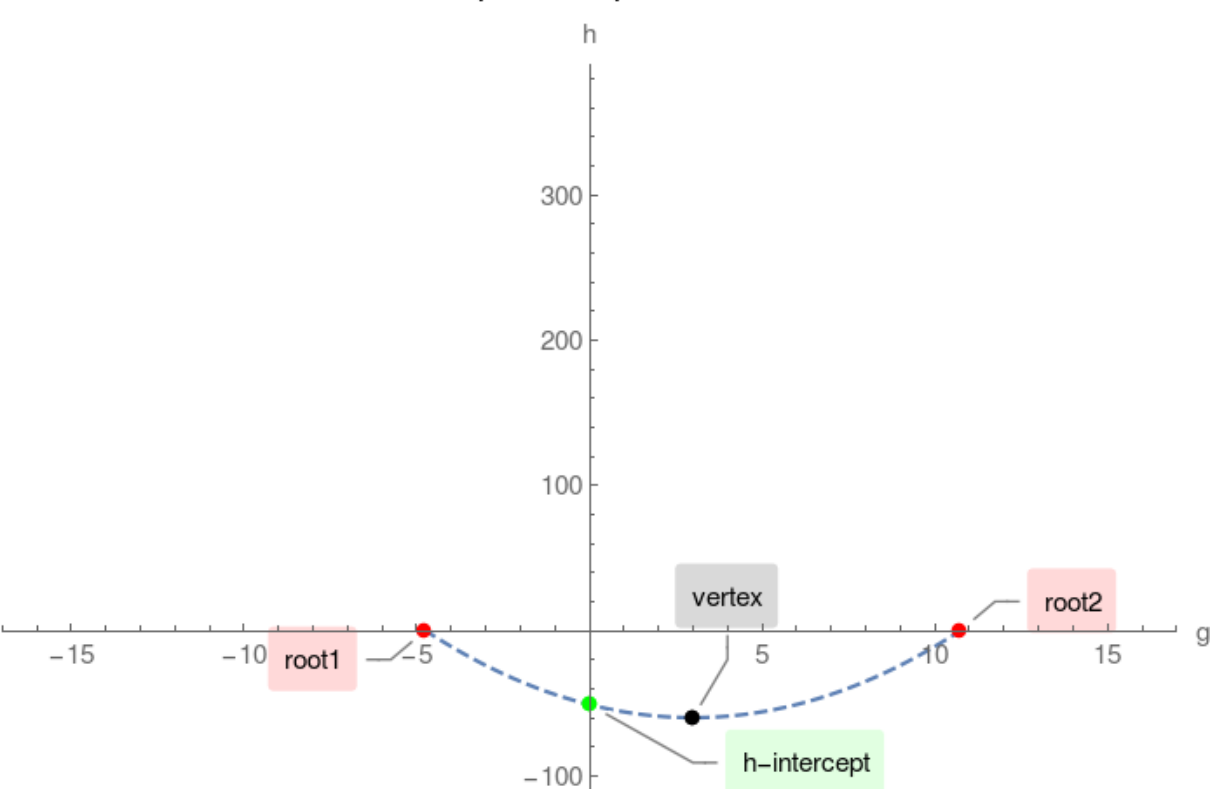
Compute g-intercepts by solving $g^2 - 6g - 51 = 0$:

$(3 - 2\sqrt{15}, 0)$, $(3 + 2\sqrt{15}, 0)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

