

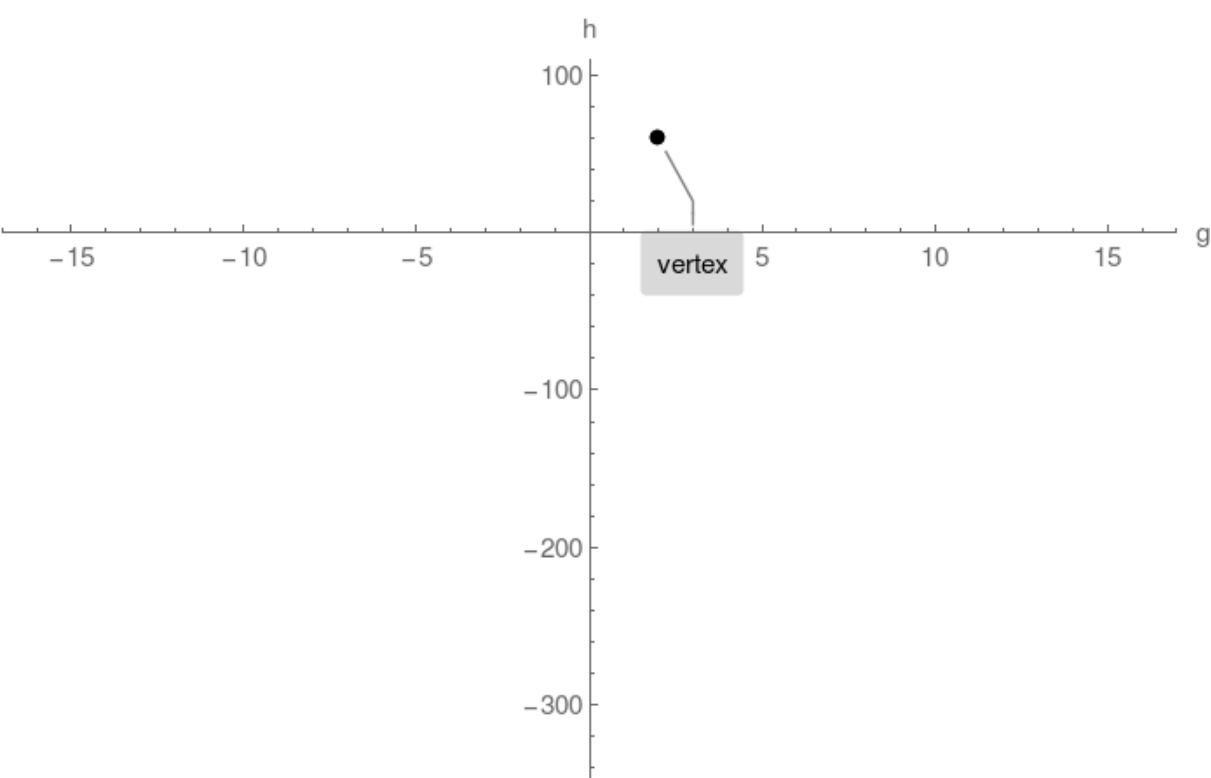
Example 1. 2 horizontal intercepts found

Plot $h(g) = -g^2 + 4g + 56$

Step 1.

Compute vertex and plot single point:

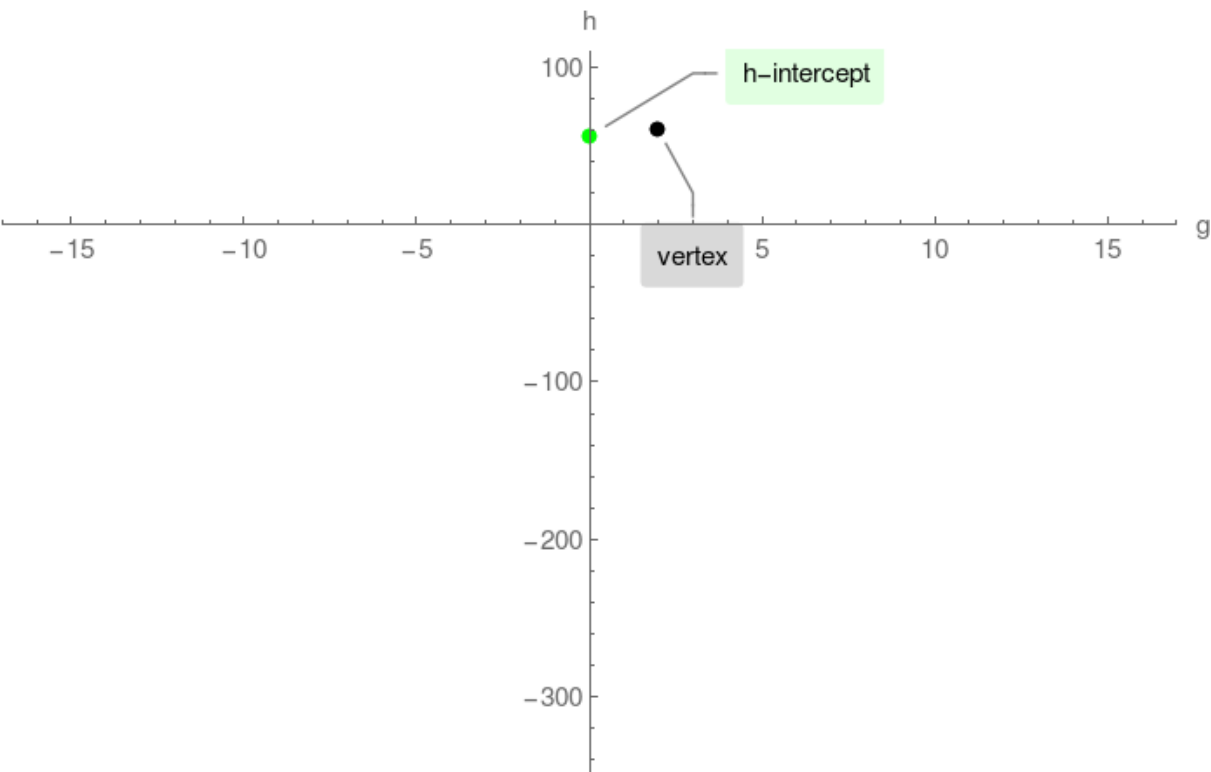
vertex = (2, 60)



Step 2.

Compute h-intercept and plot single point:

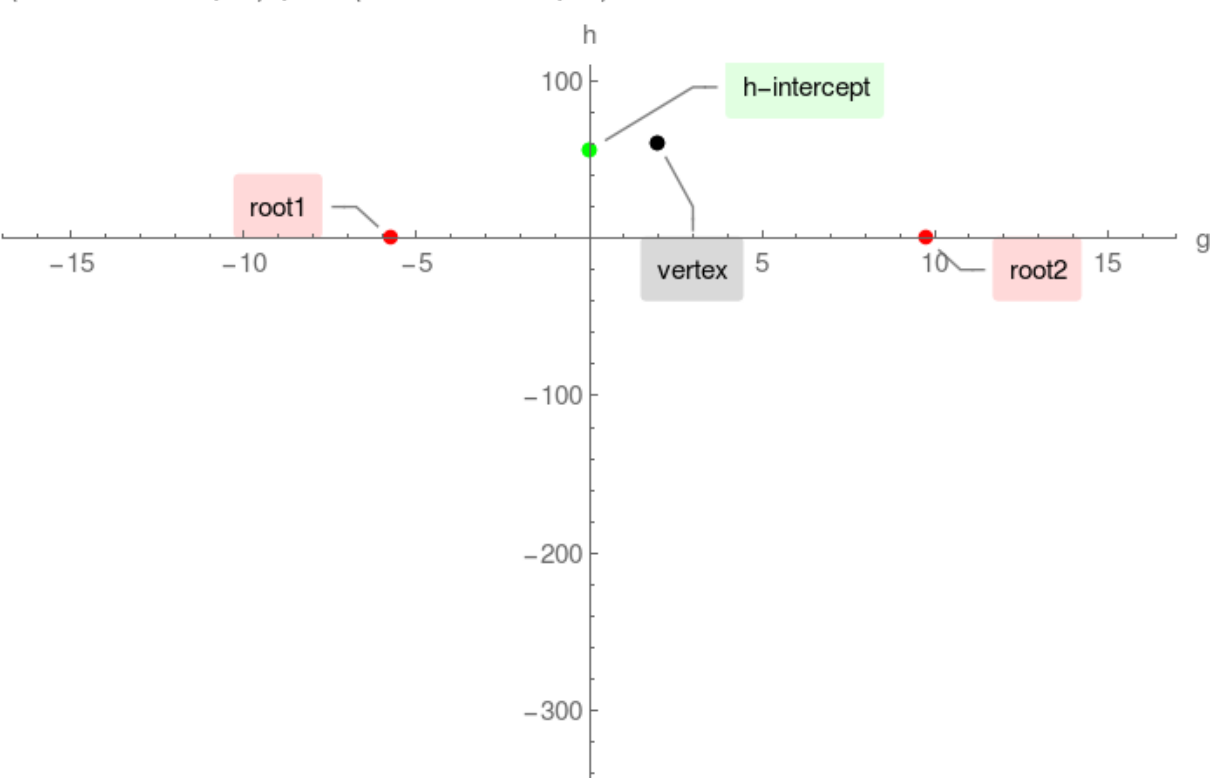
h-intercept = (0, 56)



Step 3.

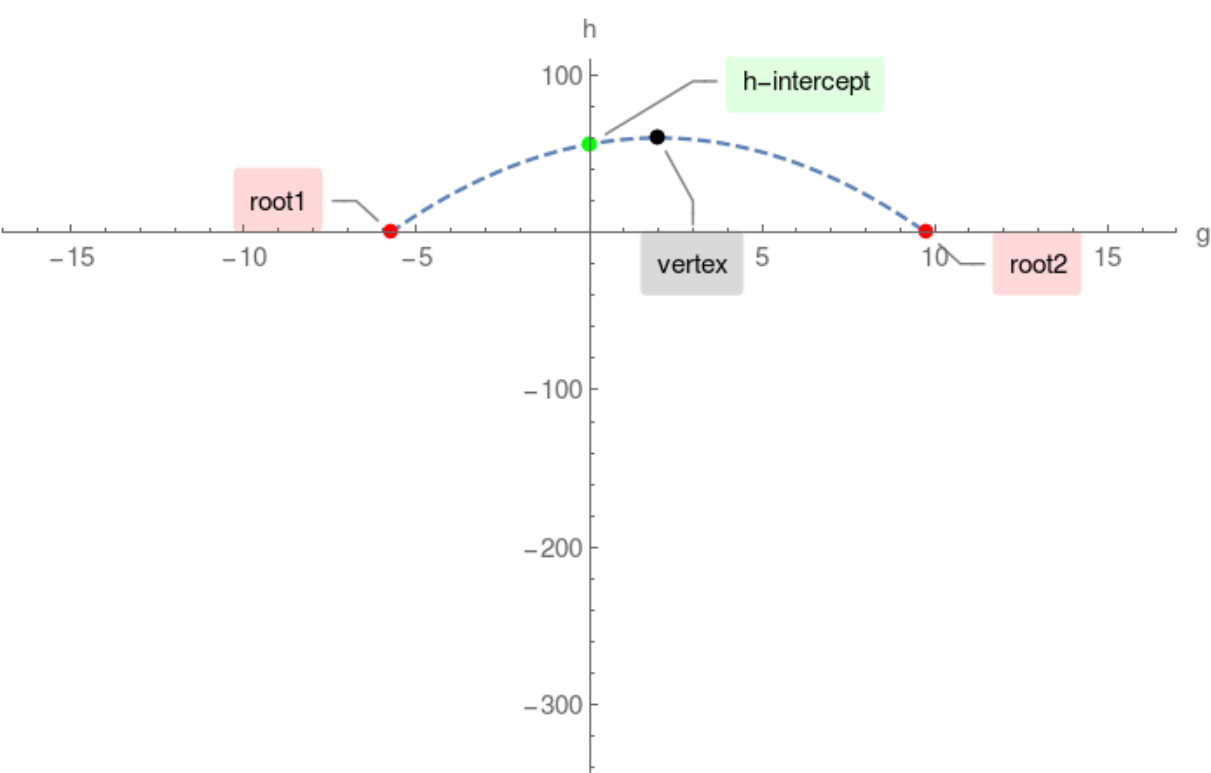
Compute g-intercepts by solving $-g^2 + 4g + 56 = 0$:

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



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

