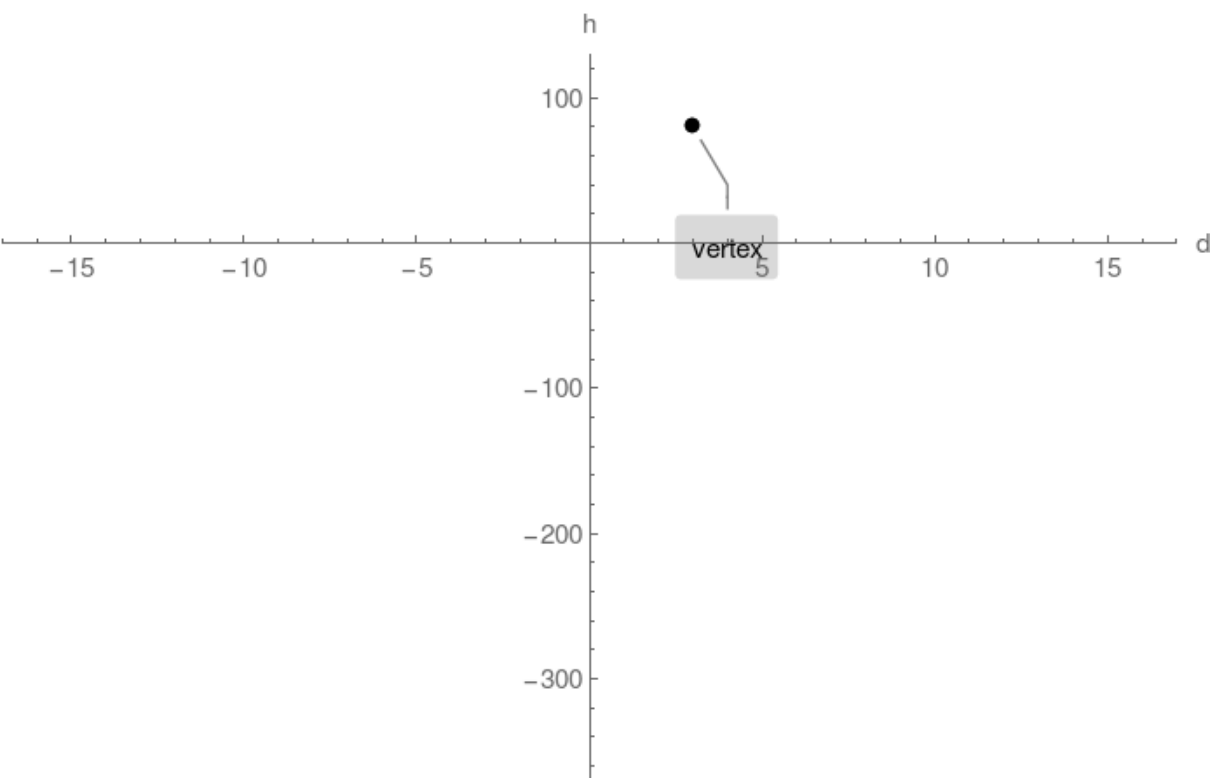# Example 1. 2 horizontal intercepts found

Plot $h(d) = -d^2 + 6d + 71$

**Step 1.**
Compute vertex and plot single point:
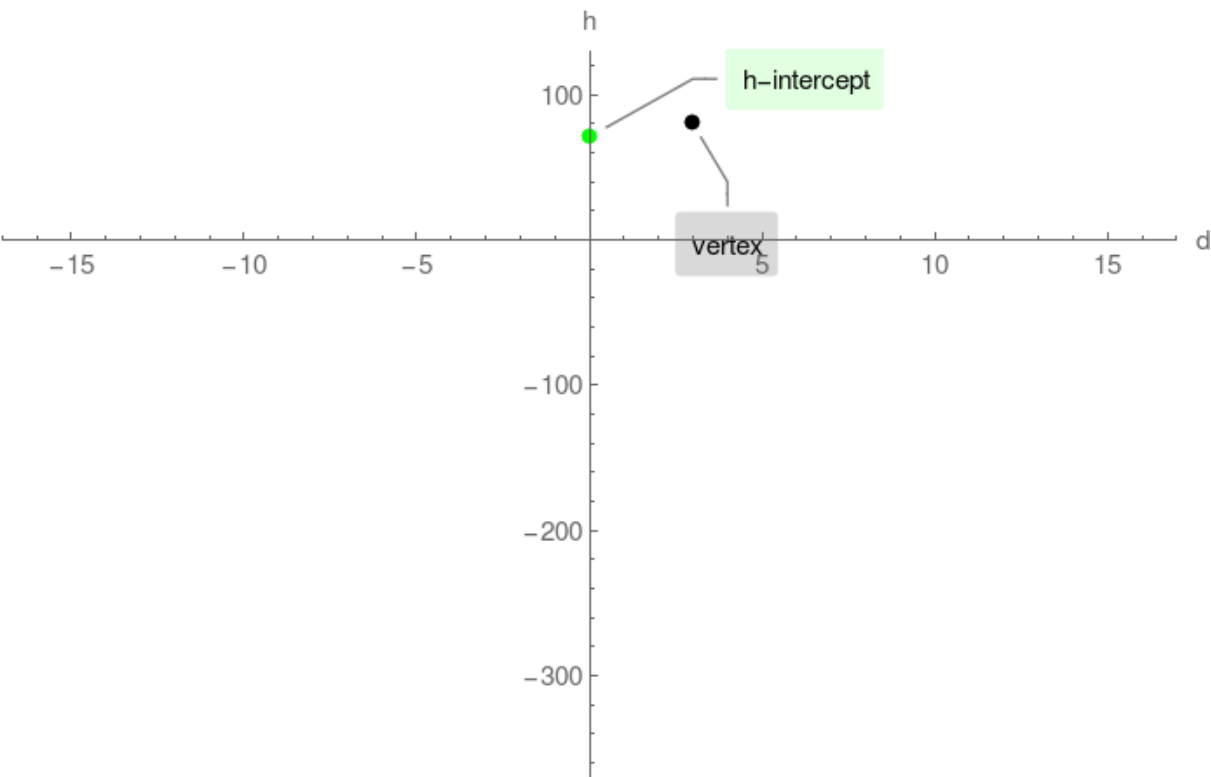vertex=(3,80)



**Step 2.**
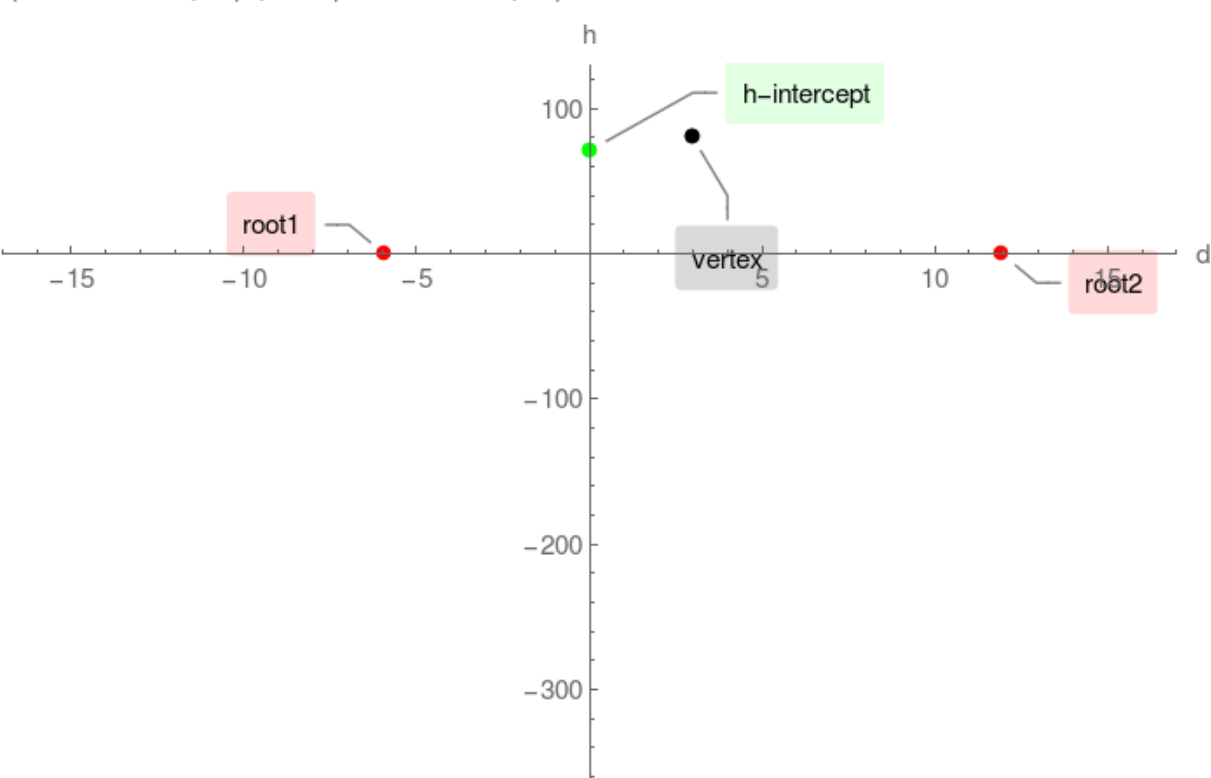Compute h-intercept and plot single point:
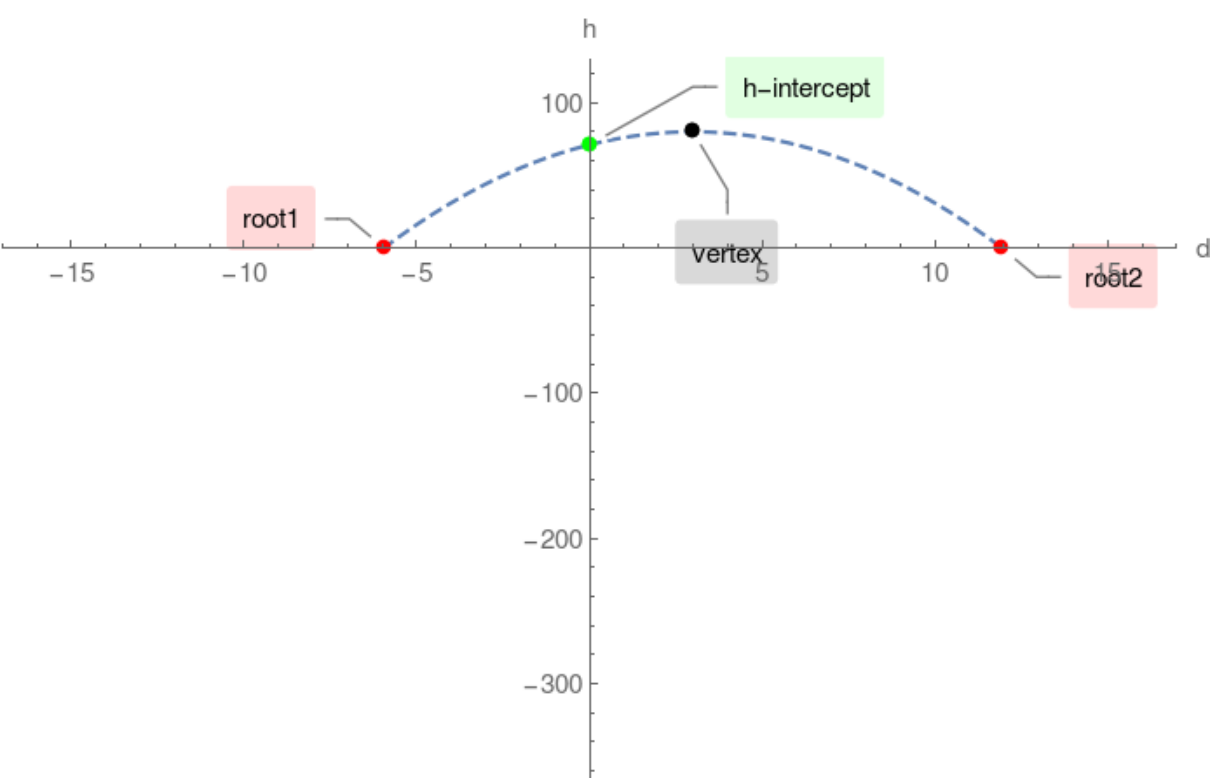h-intercept=(0,71)



**Step 3.**
Compute d-intercepts by solving $-d^2 + 6d + 71 = 0$:
$(3 - 4\sqrt{5}, 0)$,    $(3 + 4\sqrt{5}, 0)$



**Step 4.**
connect the above computed points:



**Step 5.**
Extend the parabola beyond the range of intercepts