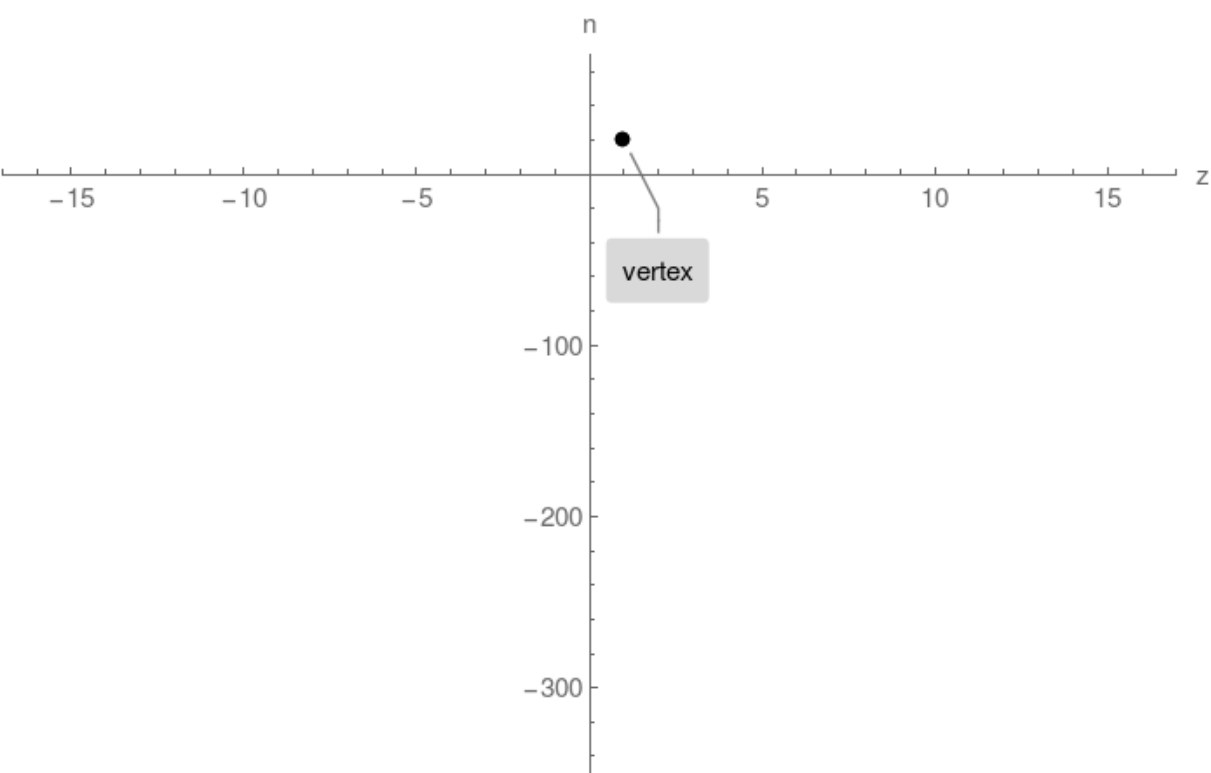# Example 1. 2 horizontal intercepts found

Plot $n(z) = -z^2 + 2z + 19$

Step 1.
Compute vertex and plot single point:
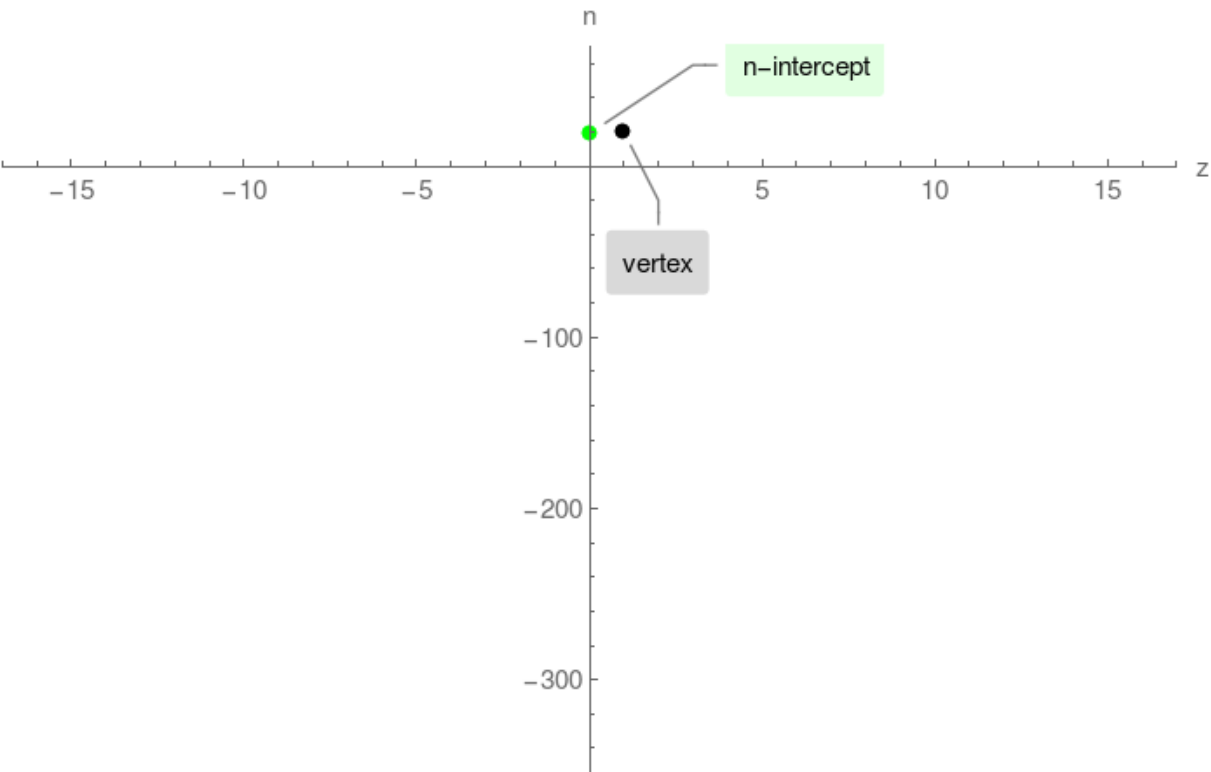vertex=$(1, 20)$

Step 2.
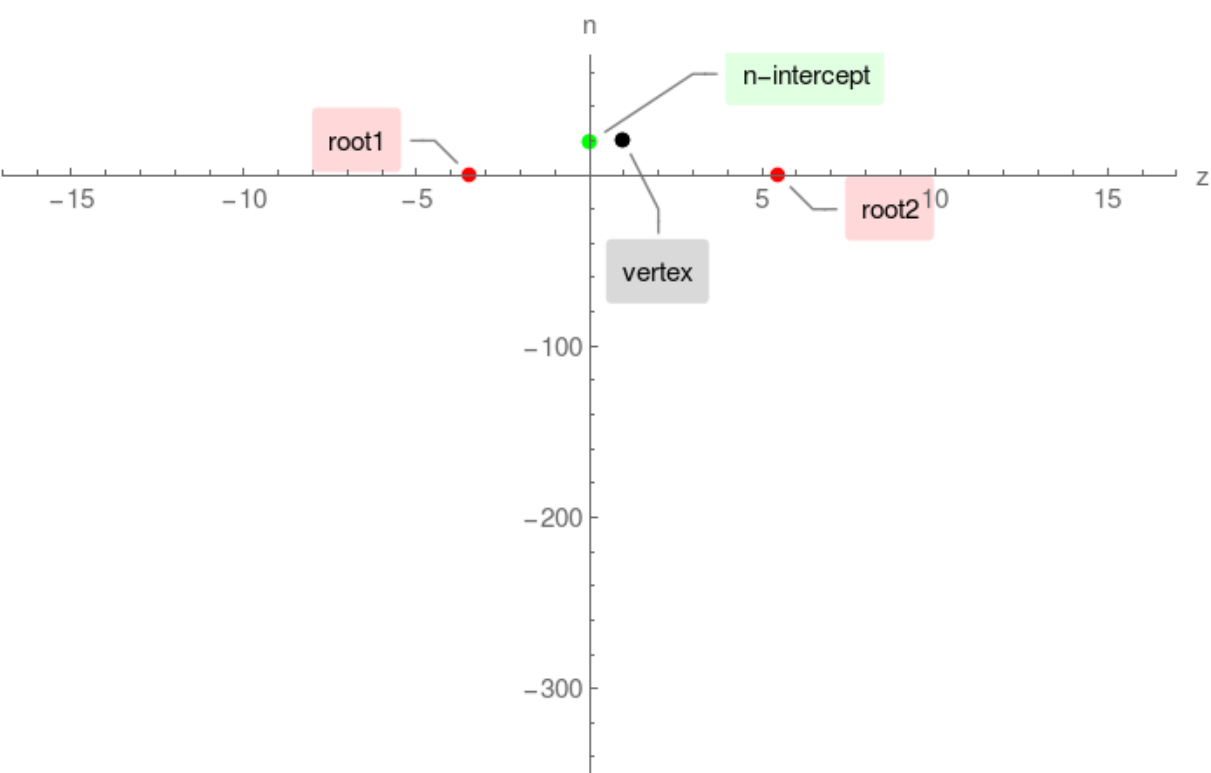Compute n-intercept and plot single point:
n-intercept=$(0, 19)$
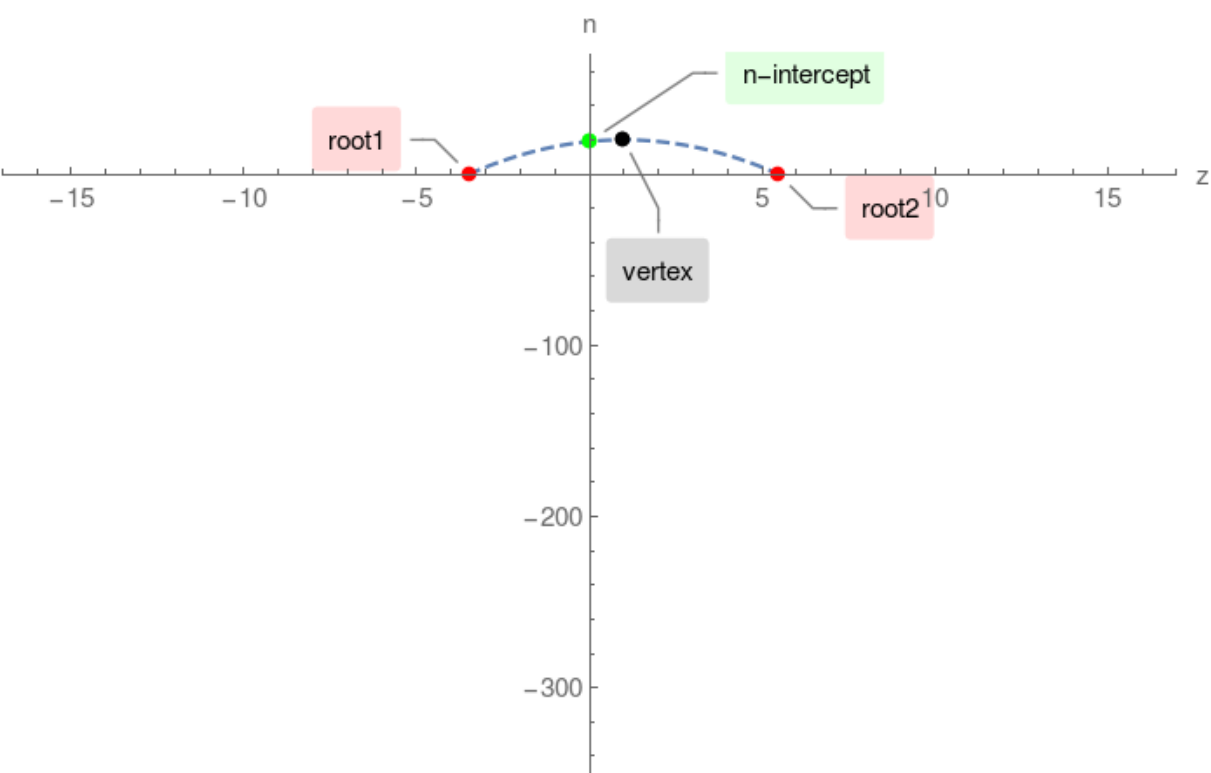

Step 3.
Compute z-intercepts by solving $-z^2 + 2z + 19 = 0$:
$(1 - 2\sqrt{5}, 0)$, $(1 + 2\sqrt{5}, 0)$

Step 4.
connect the above computed points:

Step 5.
Extend the parabola beyond the range of intercepts