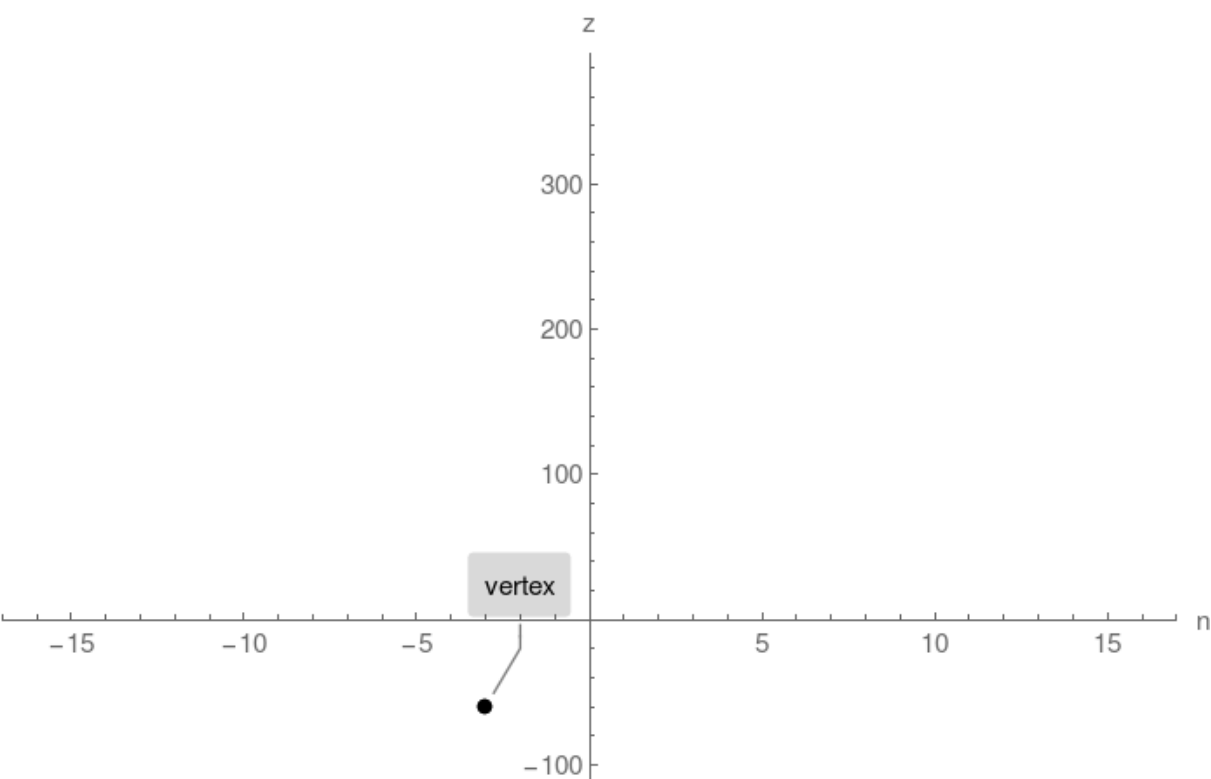# Example 1. 2 horizontal intercepts found

Plot $z(n) = n^2 + 6n - 51$

Step 1.
Compute vertex and plot single point:
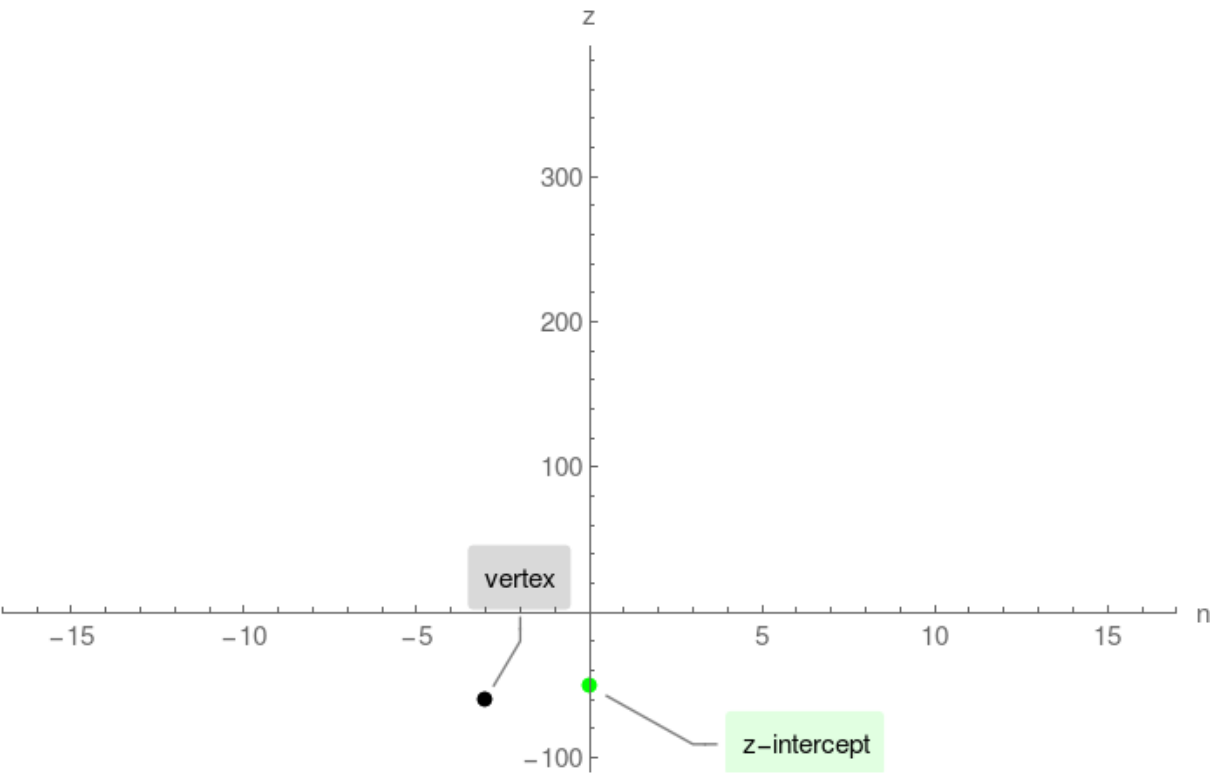vertex = $(-3, -60)$

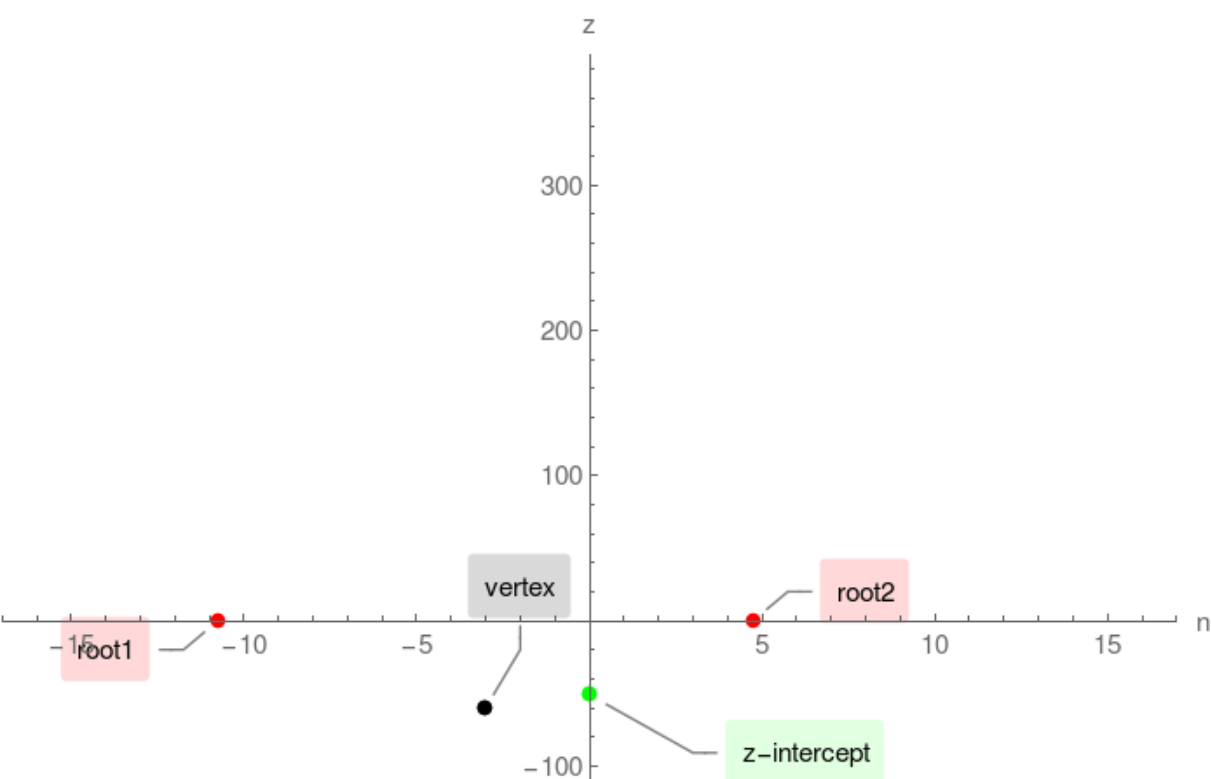**Step 2.**
Compute z-intercept and plot single point:
z-intercept = $(0, -51)$

Step 3.
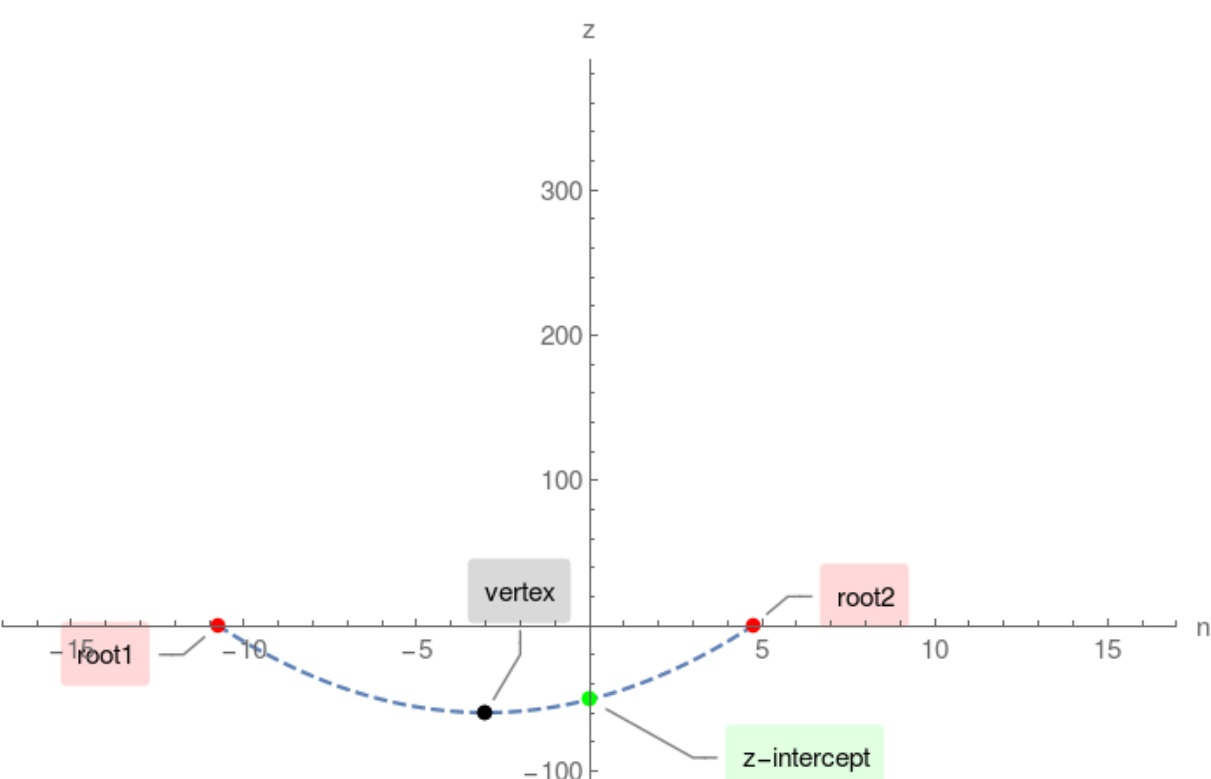Compute n-intercepts by solving $n^2 + 6n - 51 = 0$:
$(-3 - 2\sqrt{15}, 0)$, $(-3 + 2\sqrt{15}, 0)$

Step 4.
connect the above computed points:

Step 5.
Extend the parabola beyond the range of intercepts