Example 1. 2 horizontal intercepts found
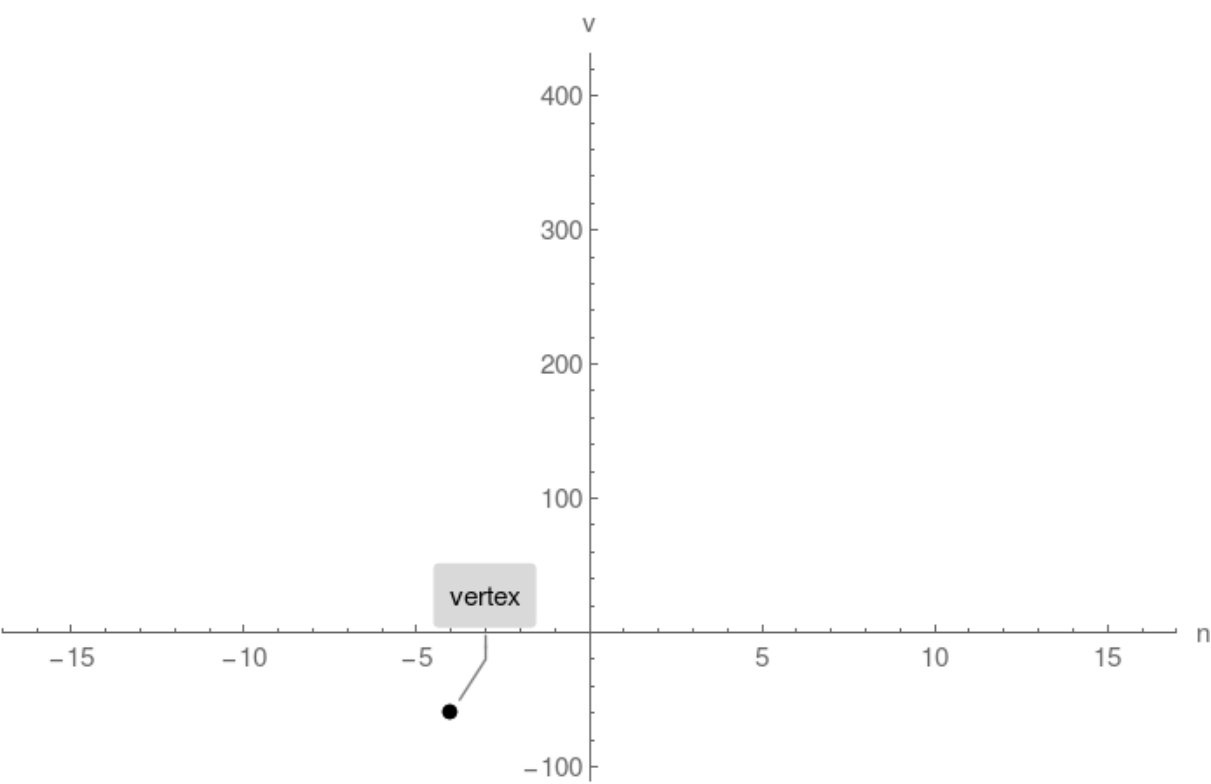
Plot $v(n) = n^2 + 8n - 44$

Step 1.
Compute vertex and plot single point:
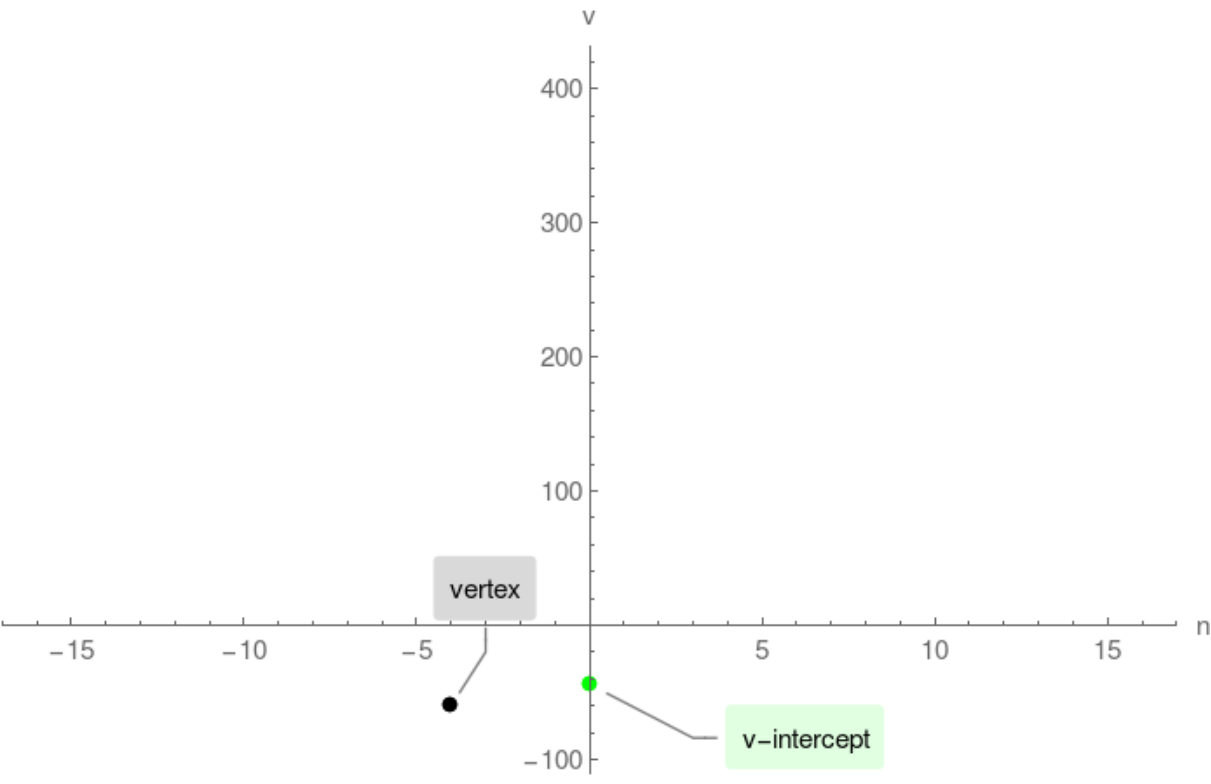$vertex = (-4, -60)$

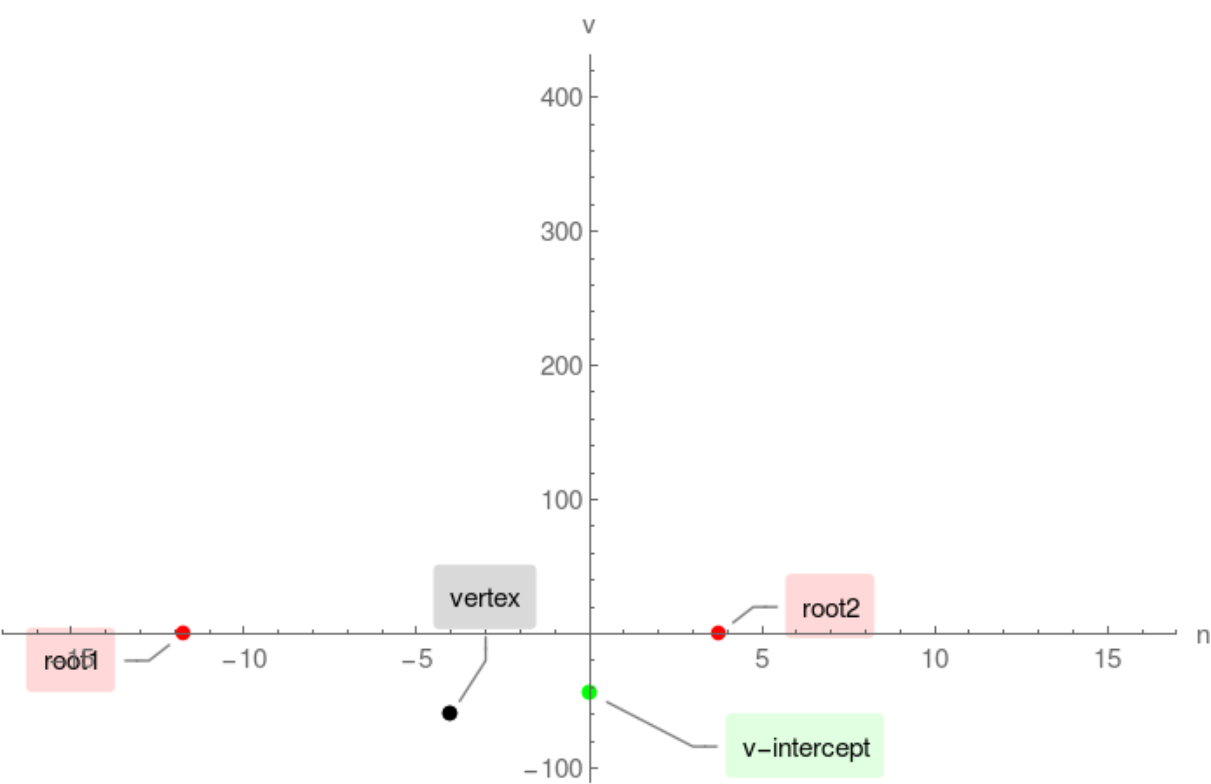**Step 2.**
Compute v-intercept and plot single point:
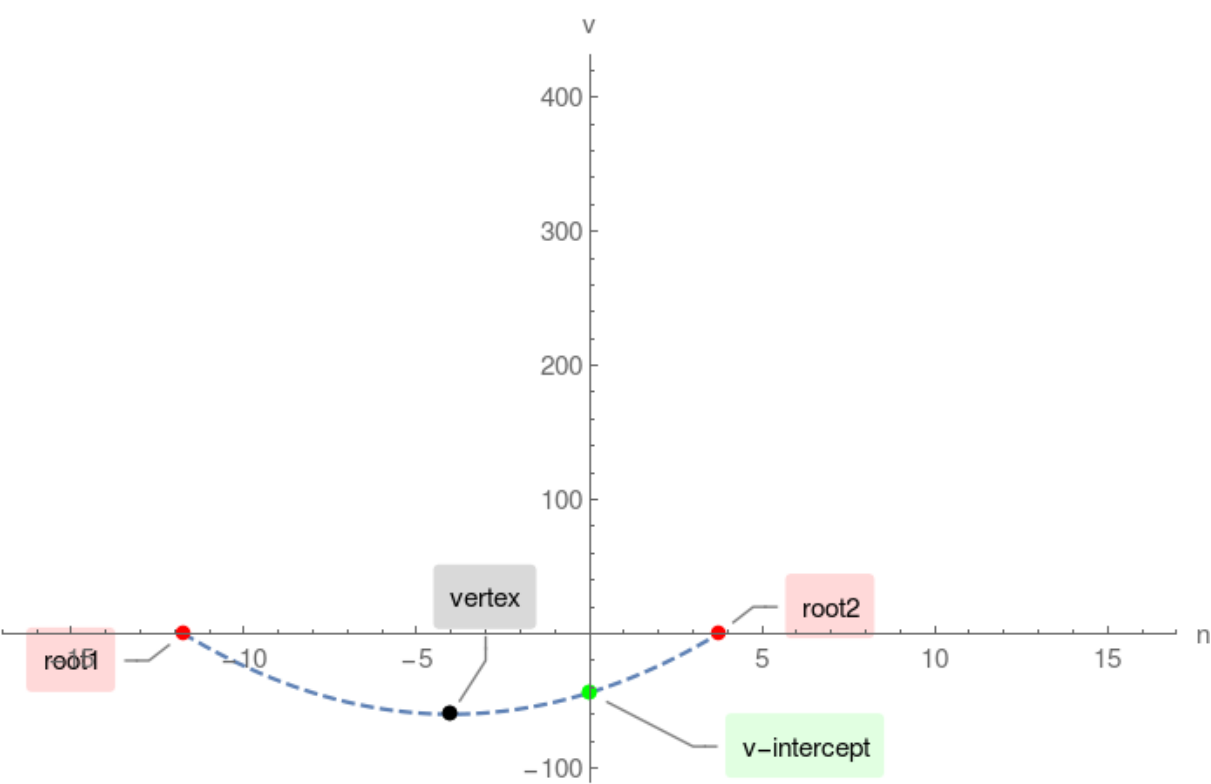$v-intercept = (0, -44)$

Step 3.
Compute n-intercepts by solving $n^2 + 8n - 44 = 0$:
$(-4 - 2\sqrt{15}, 0)$, $(-4 + 2\sqrt{15}, 0)$

Step 4.
connect the above computed points:

Step 5.
Extend the parabola beyond the range of intercepts