# Example 1. 2 horizontal intercepts found
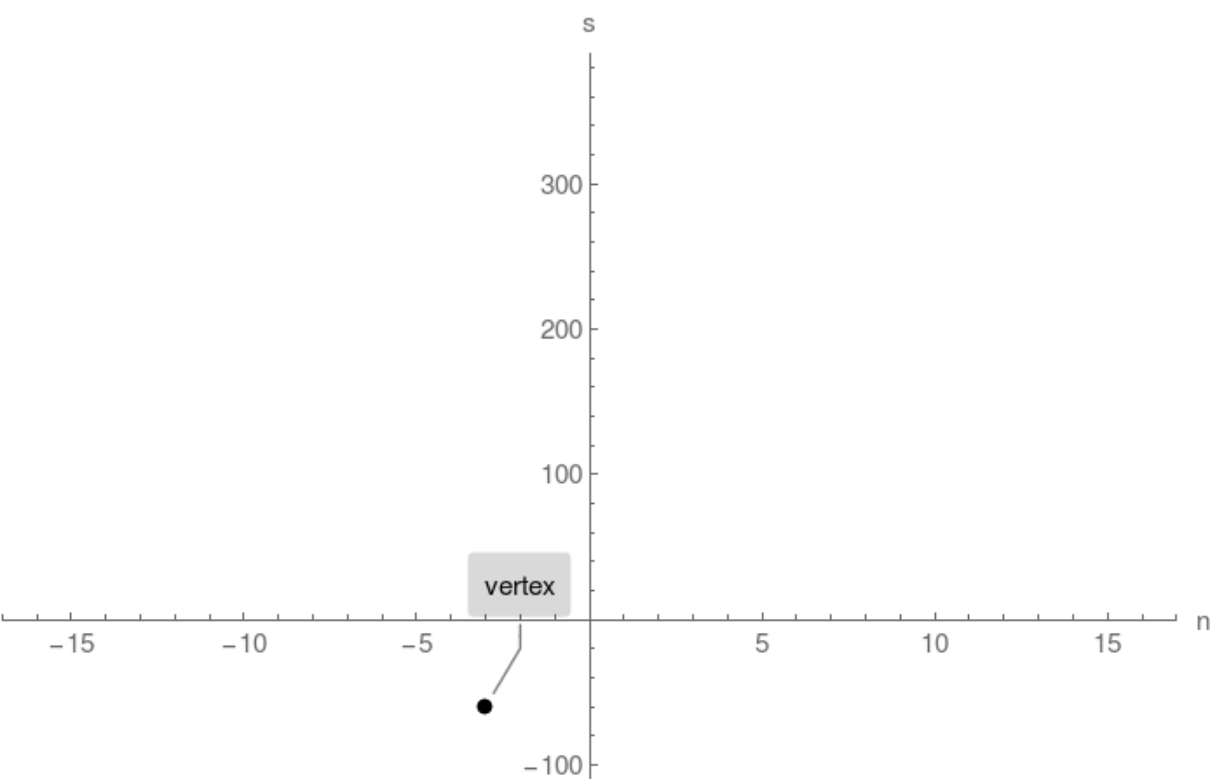
Plot $s(n) = n^2 + 6n - 51$

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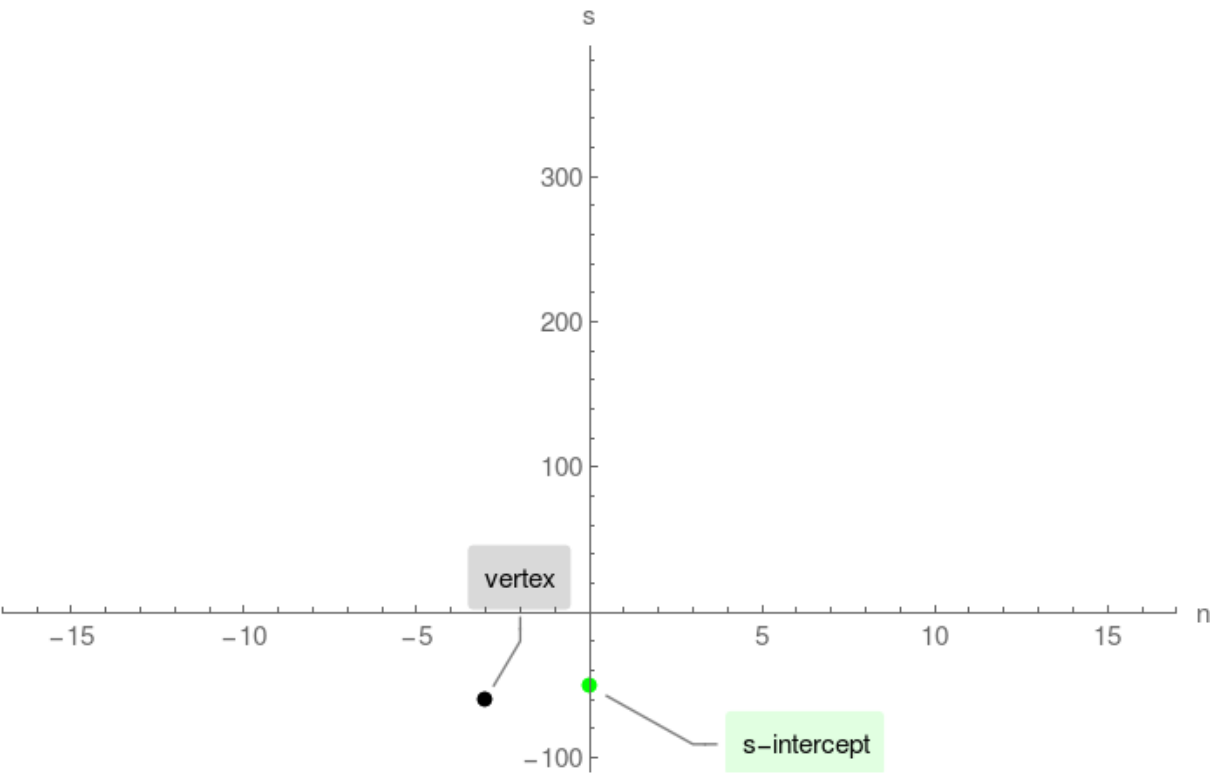$vertex = (-3, -60)$



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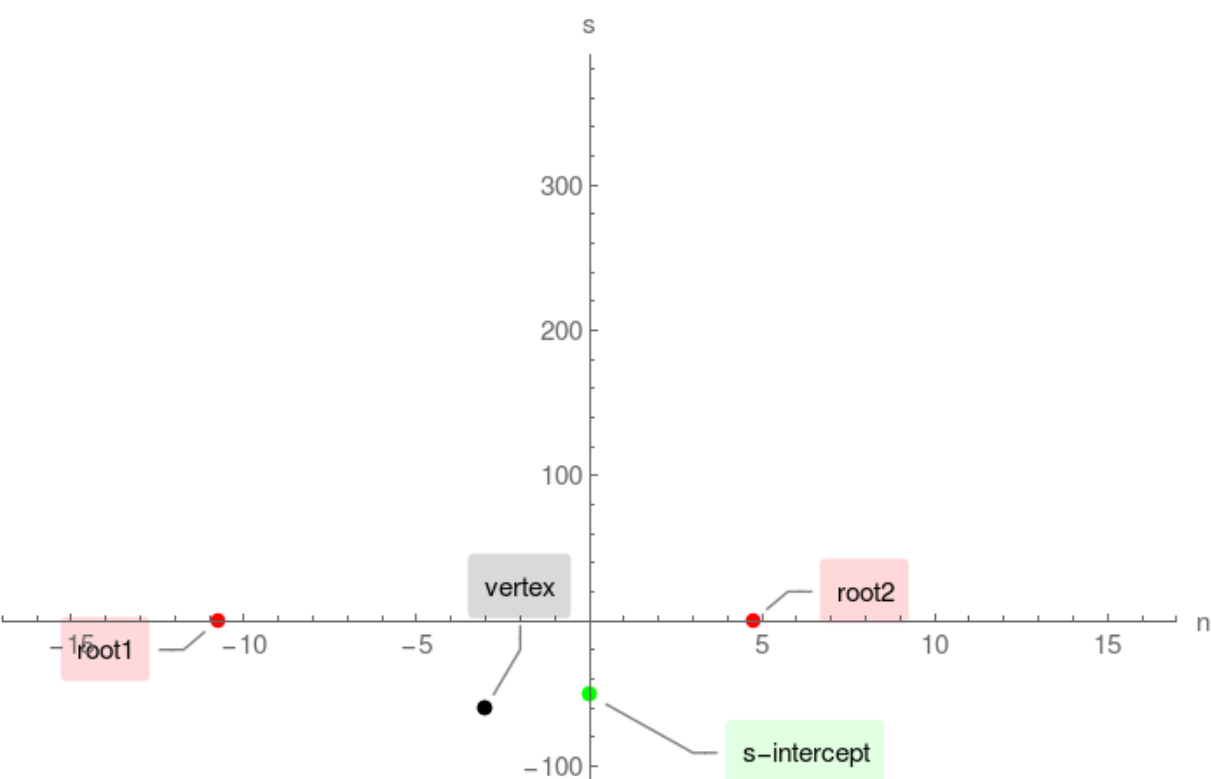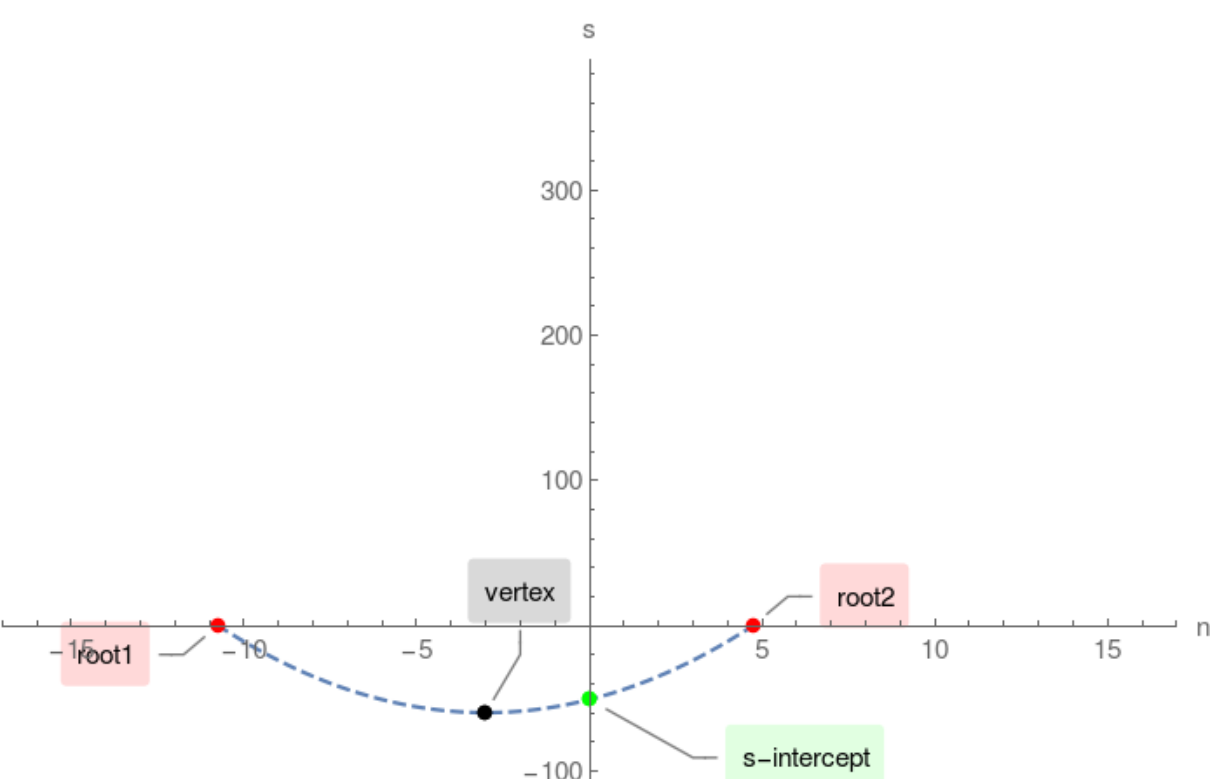$s-intercept = (0, -51)$



**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