

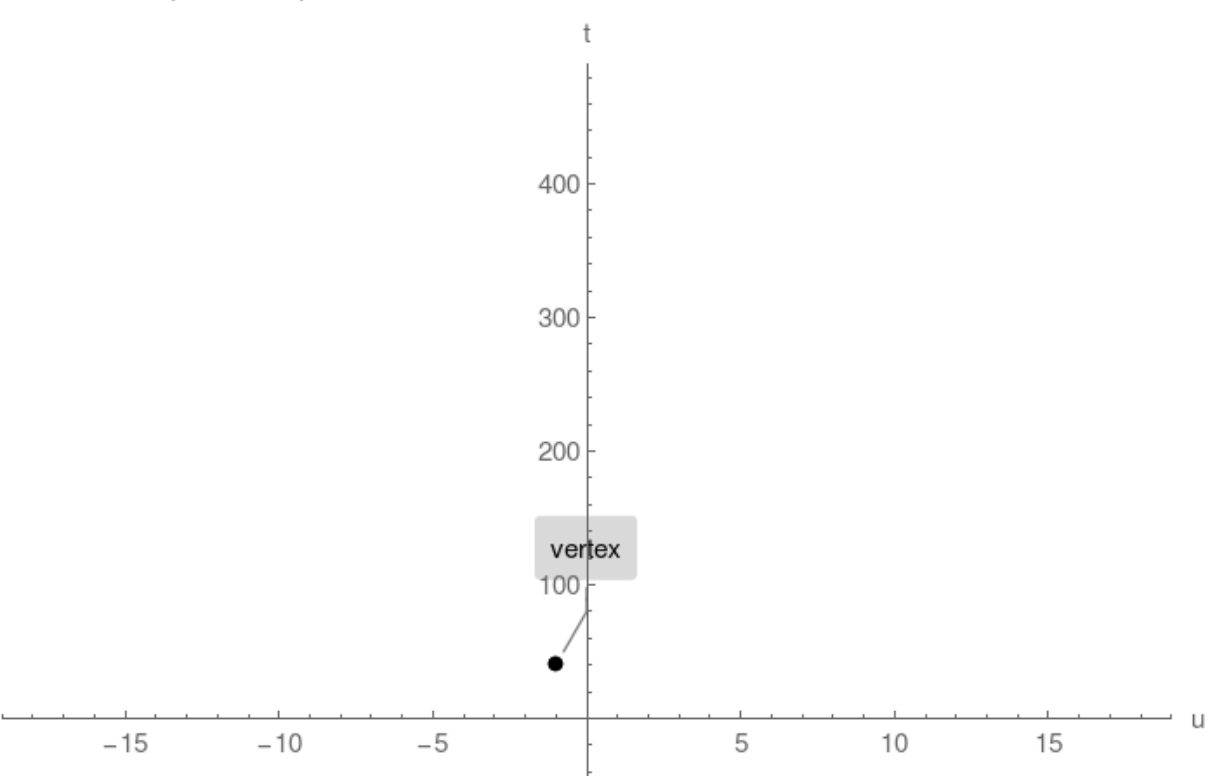
Example 2. No horizontal intercepts found

Plot $t(u) = u^2 + 2u + 41$

Step 1.

Compute vertex and plot single point:

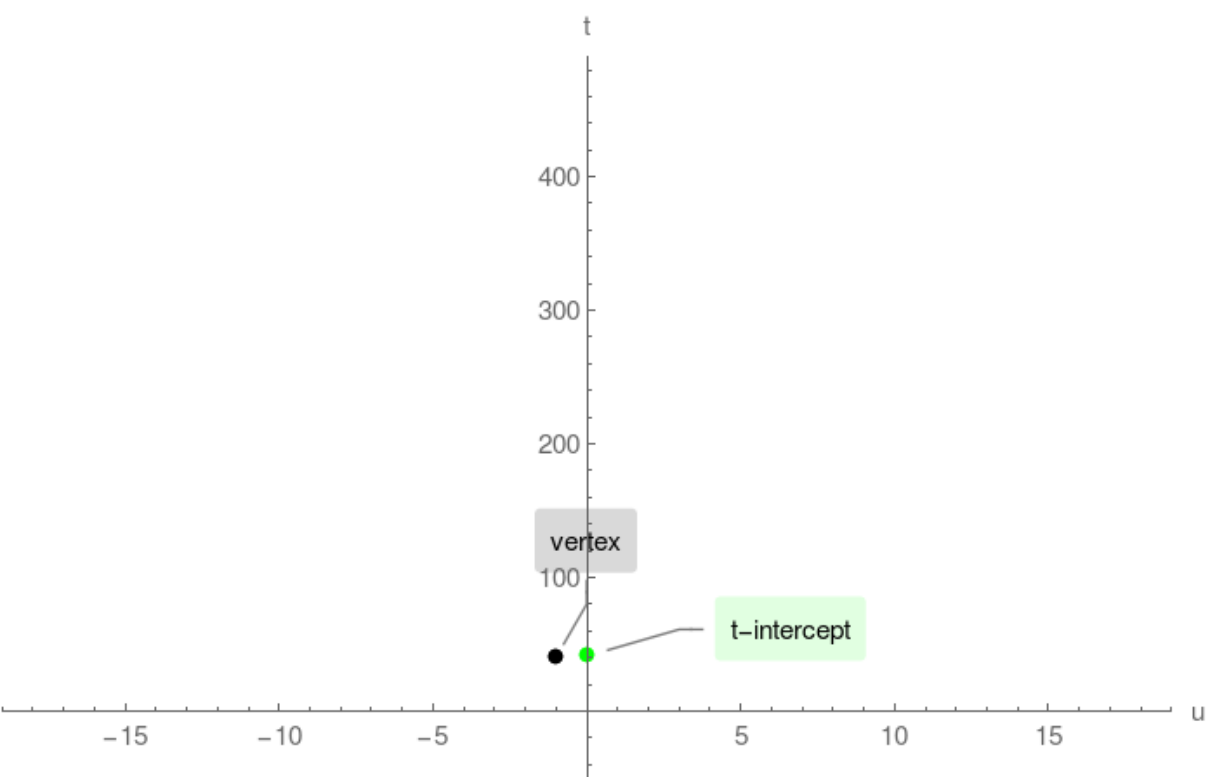
vertex = $(-1, 40)$



Step 2.

Compute t-intercept and plot single point:

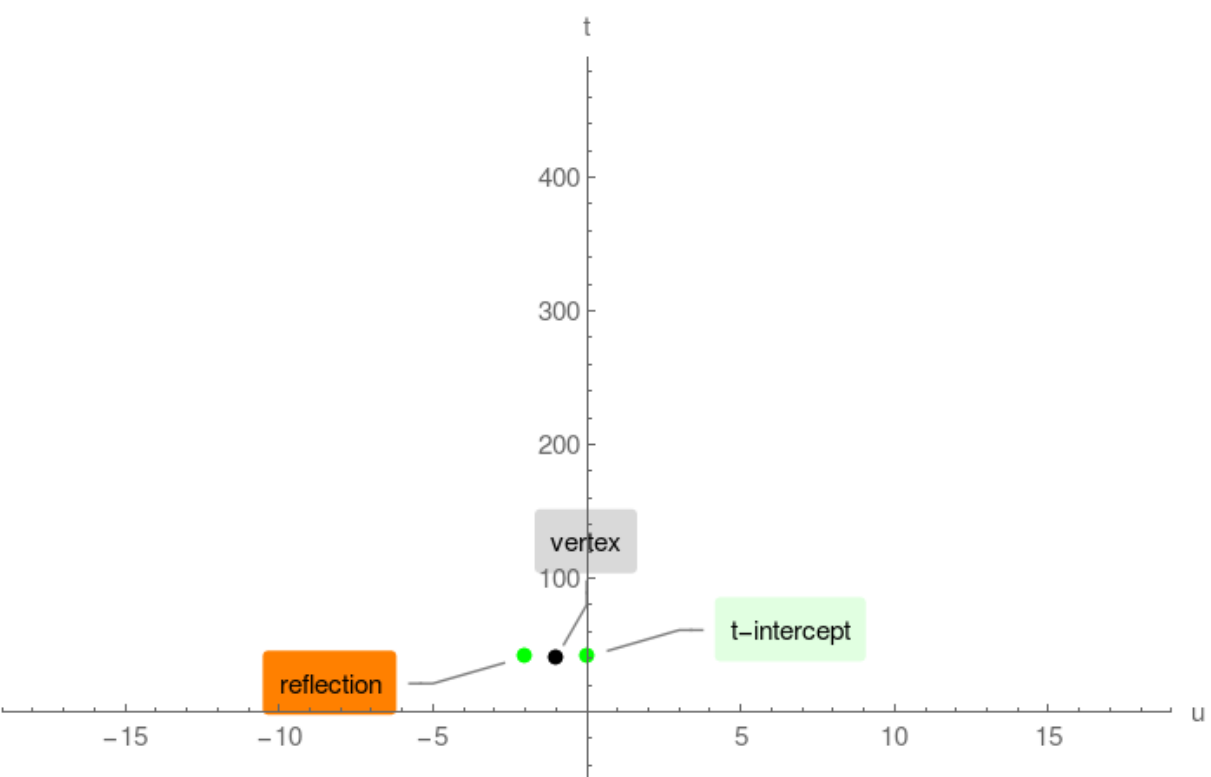
t-intercept = $(0, 41)$



Step 3.

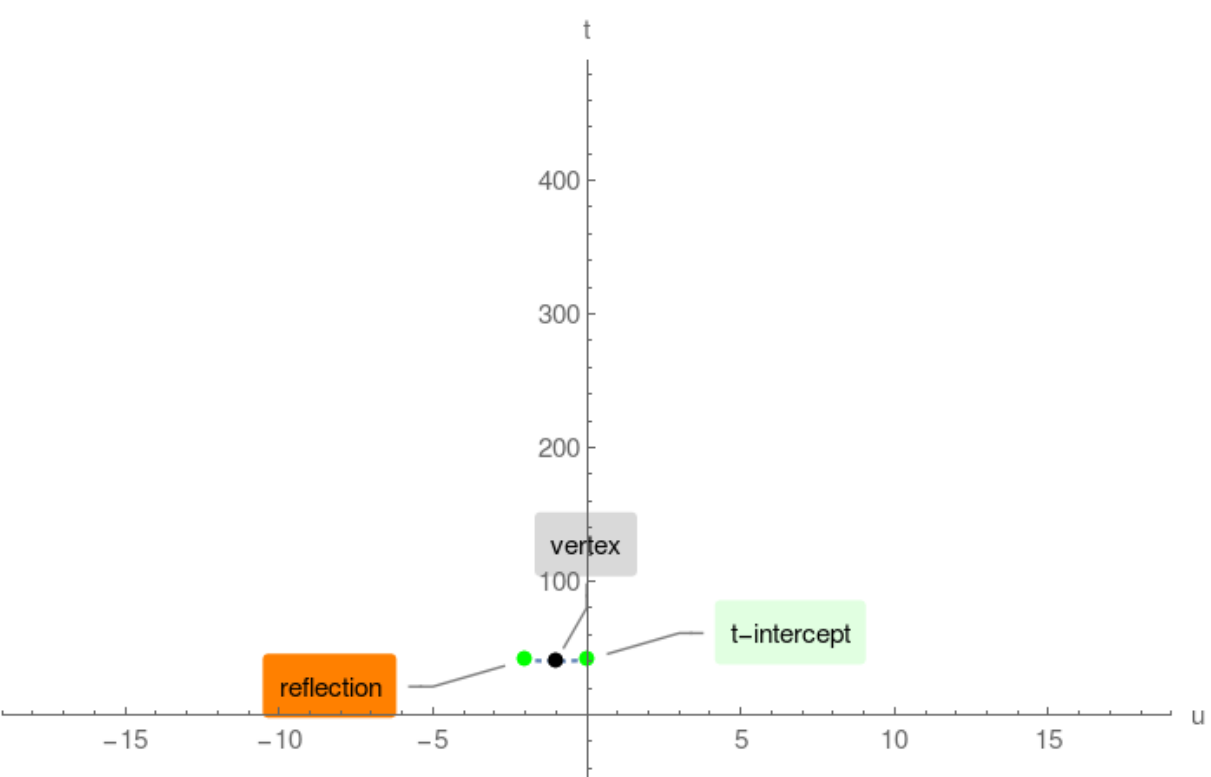
Compute t-intercept reflected against vertex,

reflection = $(-2, 41)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts

