

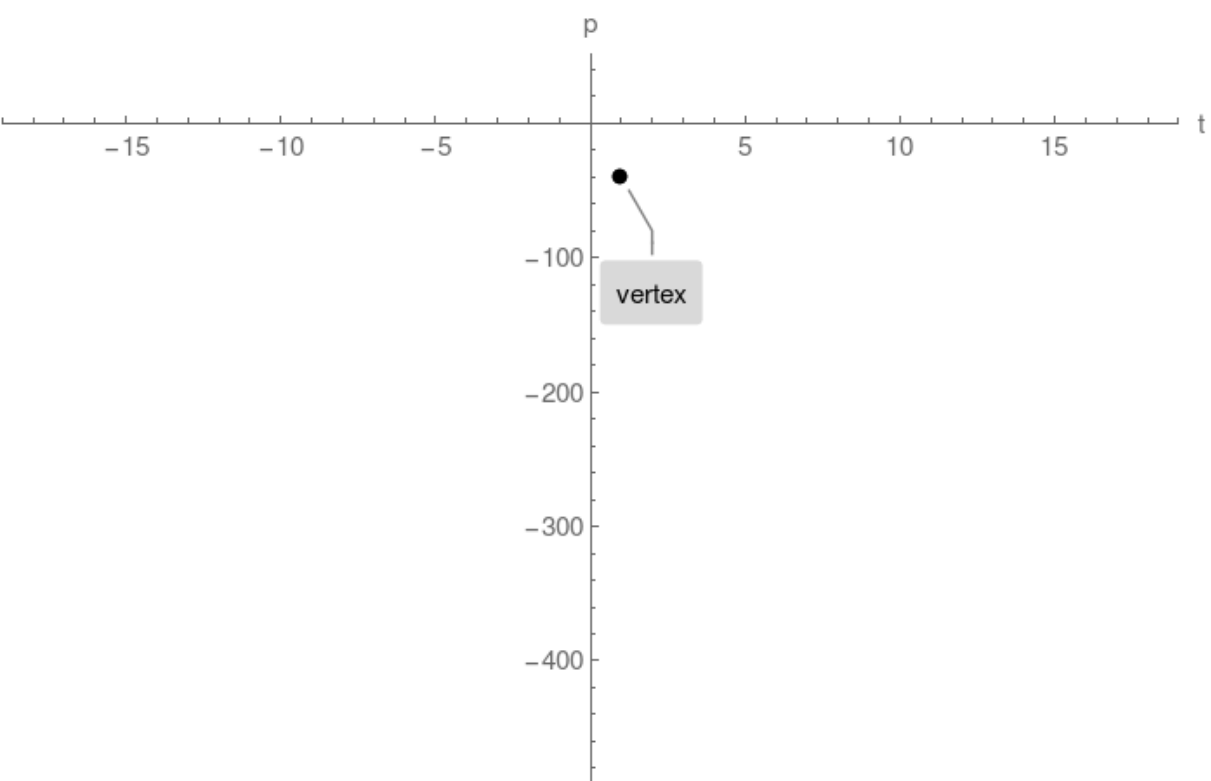
## Example 2. No horizontal intercepts found

Plot  $p(t) = -t^2 + 2t - 41$

### Step 1.

Compute vertex and plot single point:

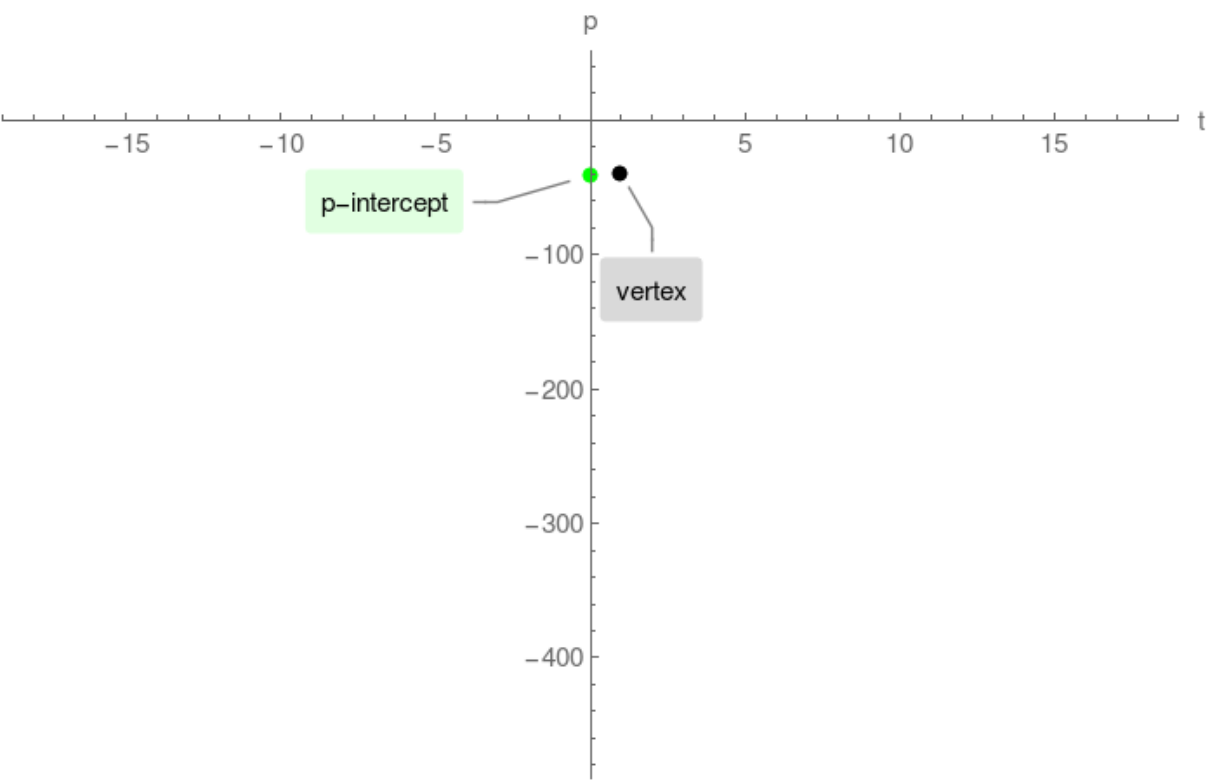
vertex =  $(1, -40)$



### Step 2.

Compute p-intercept and plot single point:

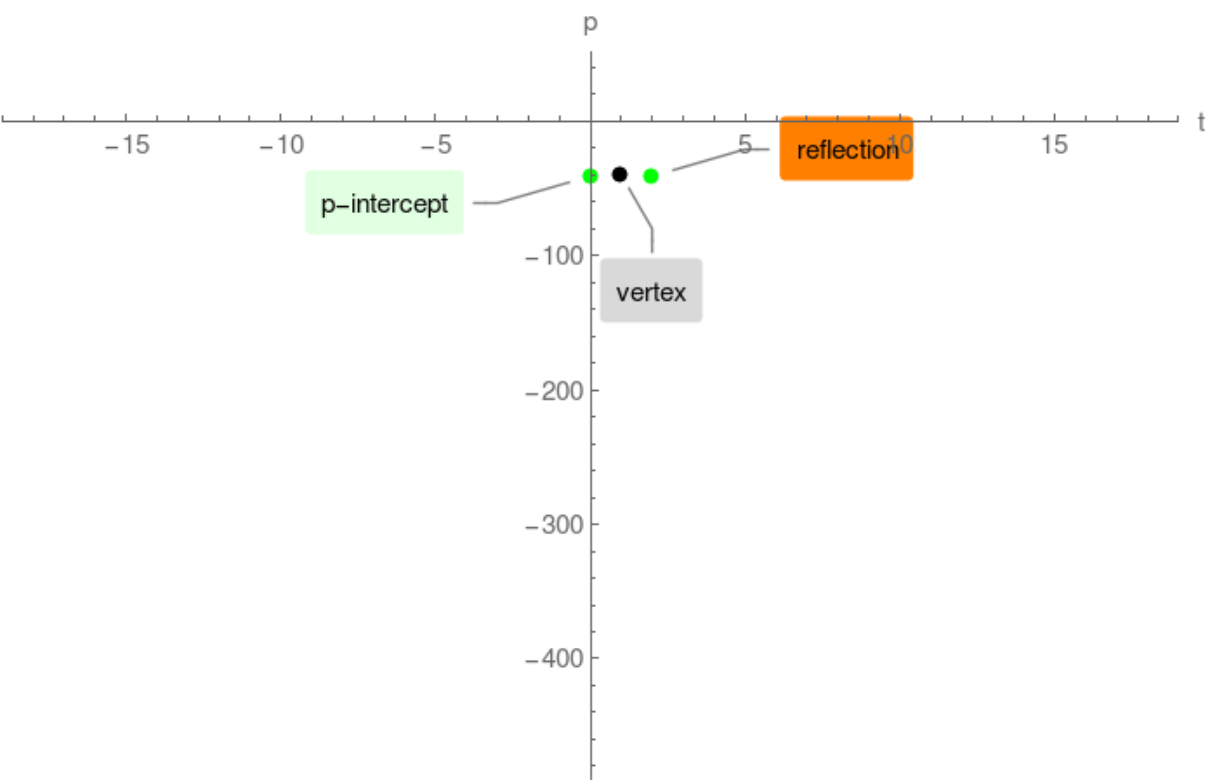
p-intercept =  $(0, -41)$



### Step 3.

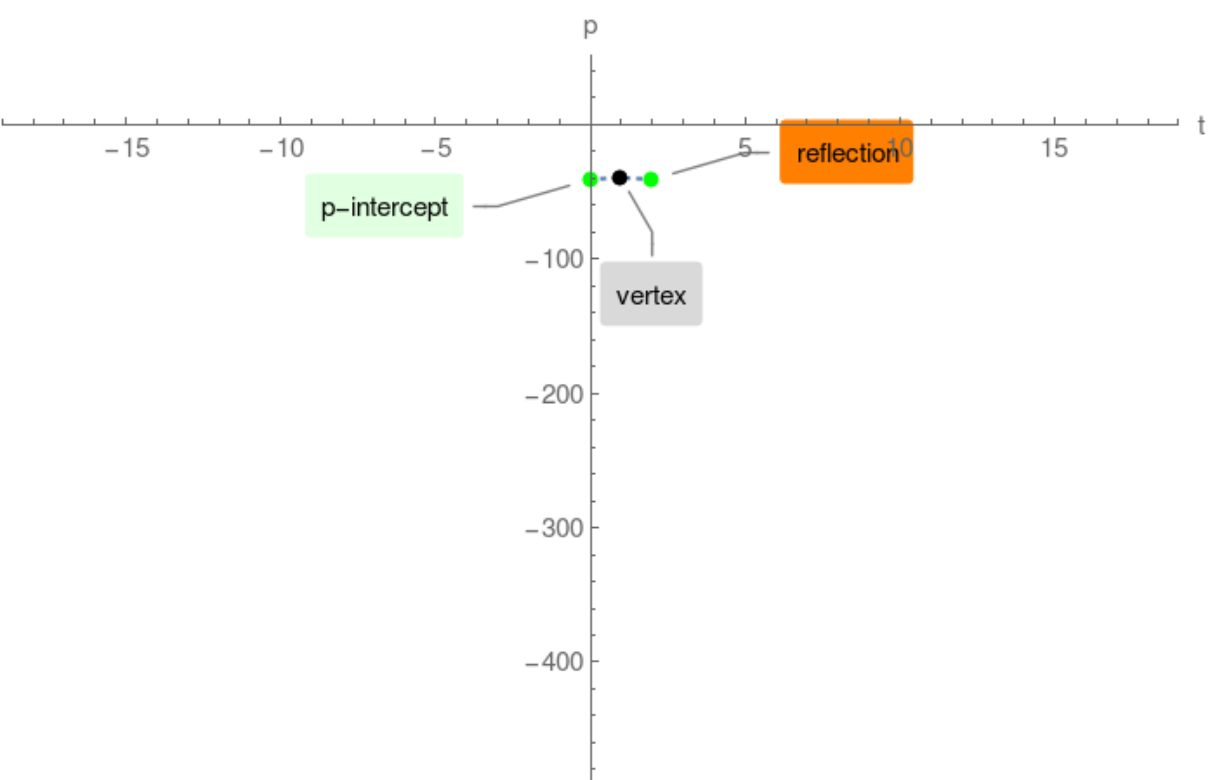
Compute p-intercept reflected against vertex,

reflection =  $(2, -41)$



### Step 4.

connect the above computed points:



### Step 5.

Extend the parabola beyond the range of intercepts

