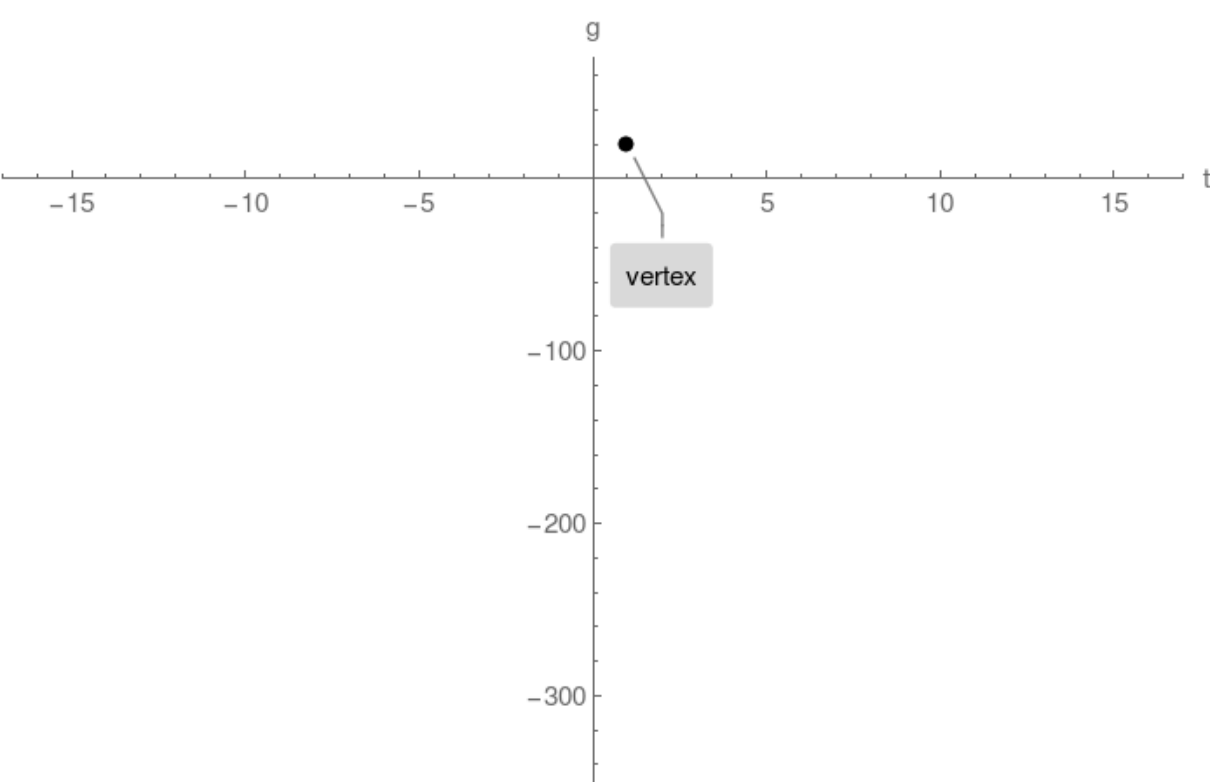# Example 1. 2 horizontal intercepts found

Plot $g(t) = -t^2 + 2t + 19$

Step 1.
Compute vertex and plot single point:
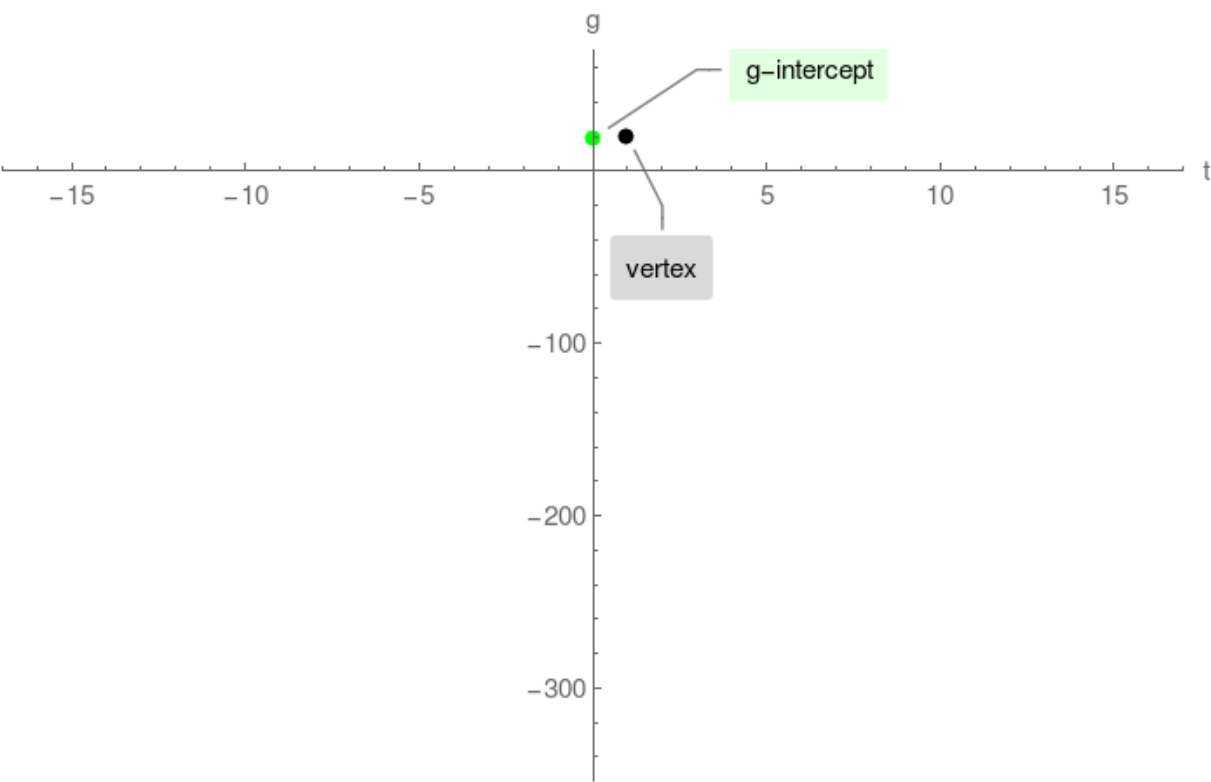vertex=$(1,20)$

Step 2.
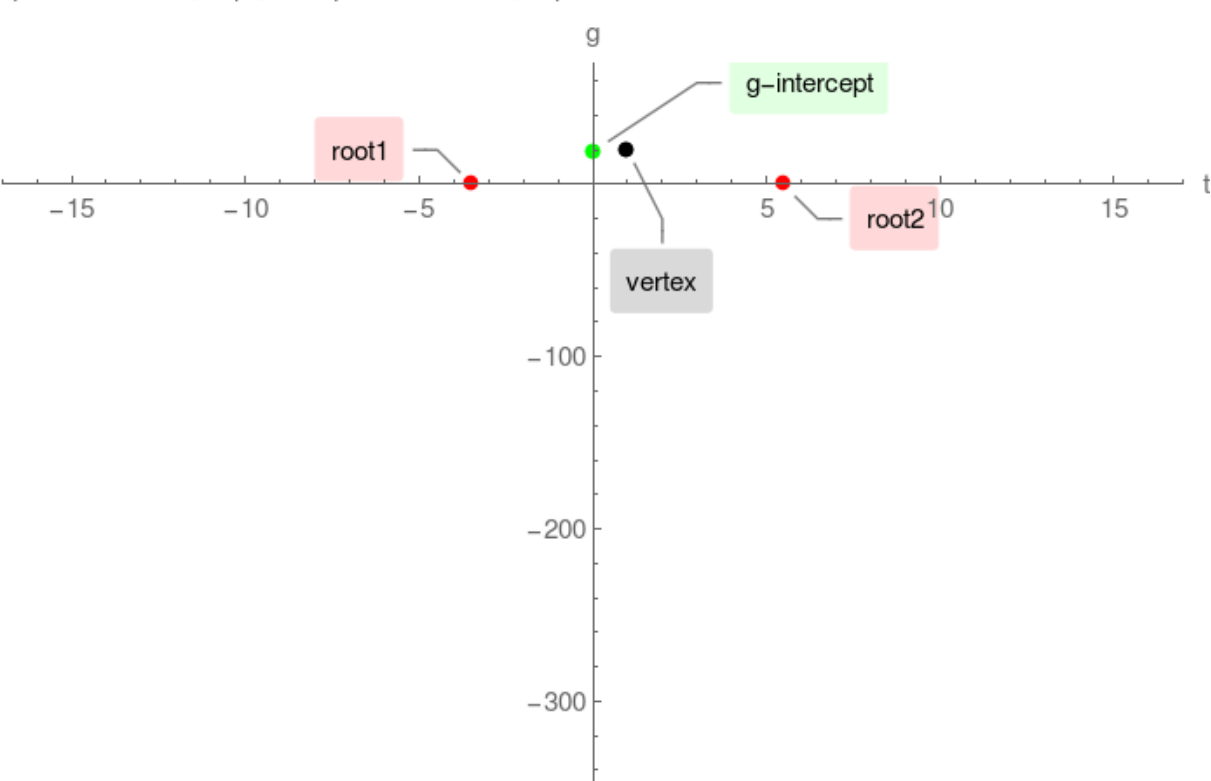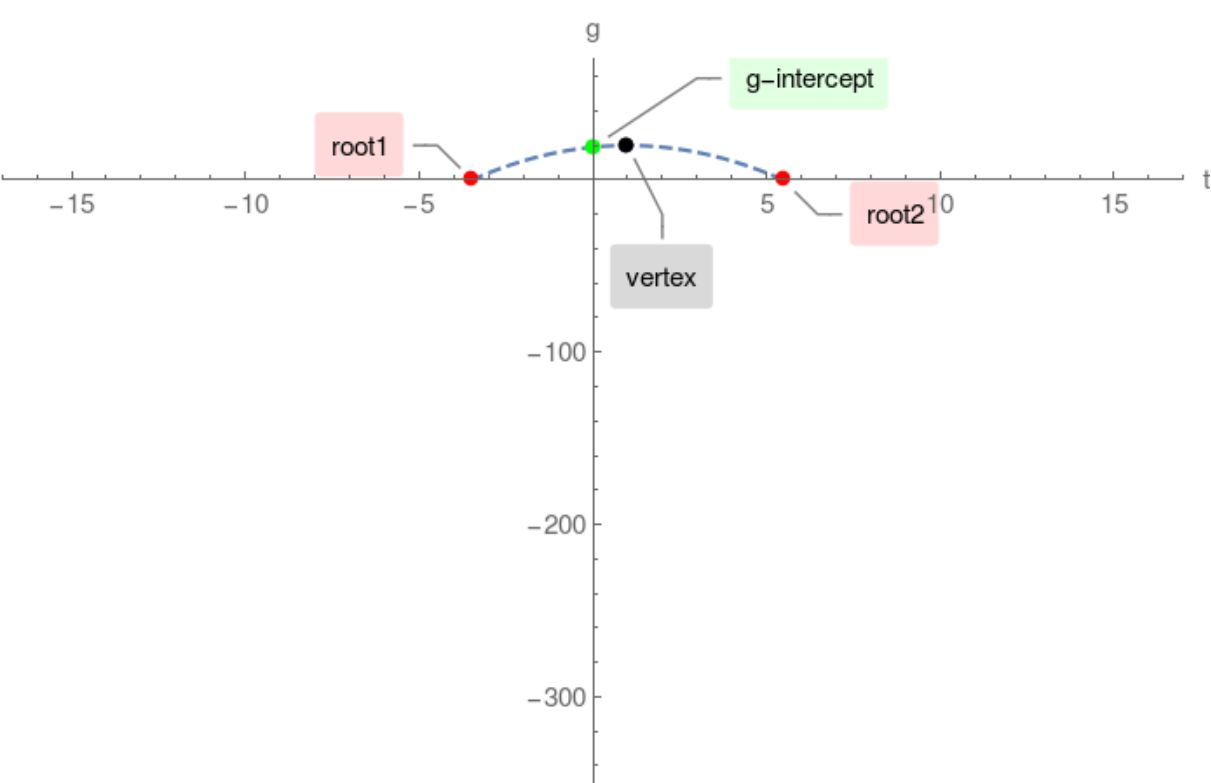Compute g−intercept and plot single point:
g−intercept=$(0,19)$

Step 3.
Compute t−intercepts by solving $-t^2 + 2t + 19=0$:
$(1 - 2\sqrt{5}, 0)$, $(1 + 2\sqrt{5}, 0)$

Step 4.
connect the above computed points:

Step 5.
Extend the parabola beyond the range of intercepts