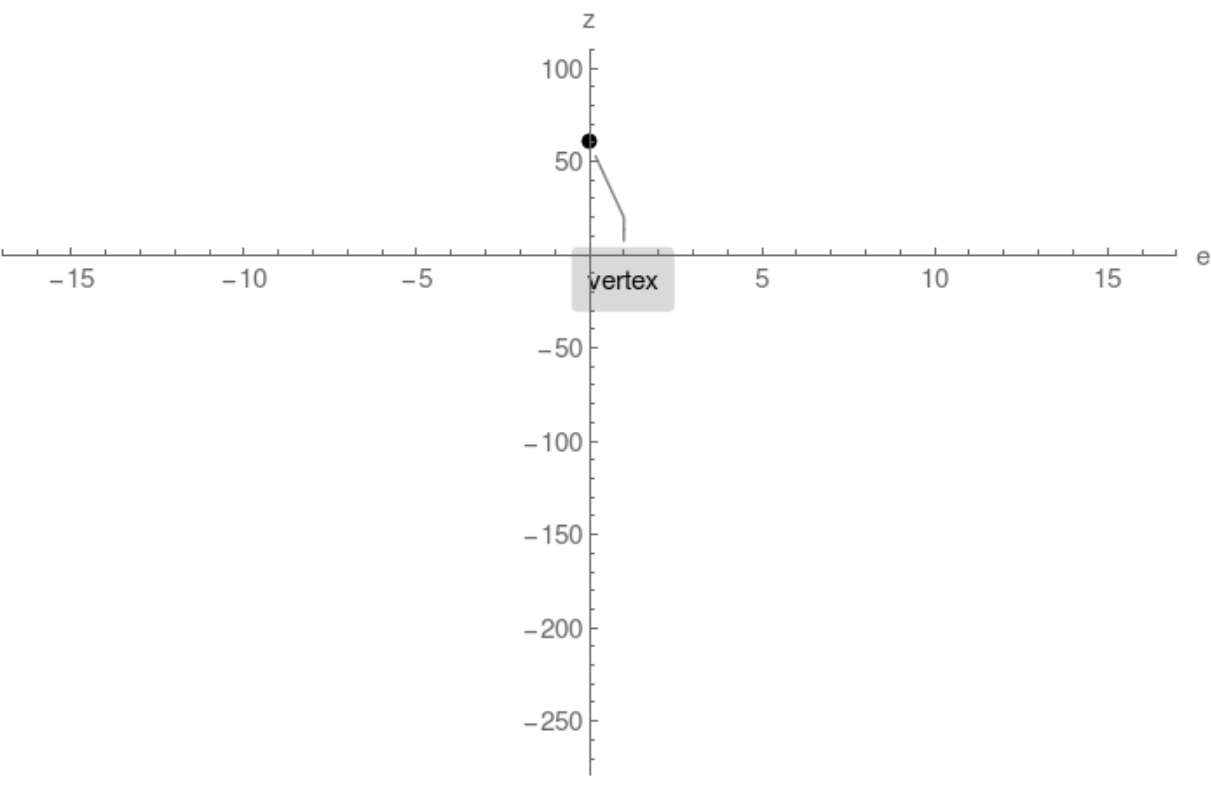
Example 1. 2 horizontal intercepts found

Plot $z(e)=60-e^2$

Step 1.

Compute vertex and plot single point:

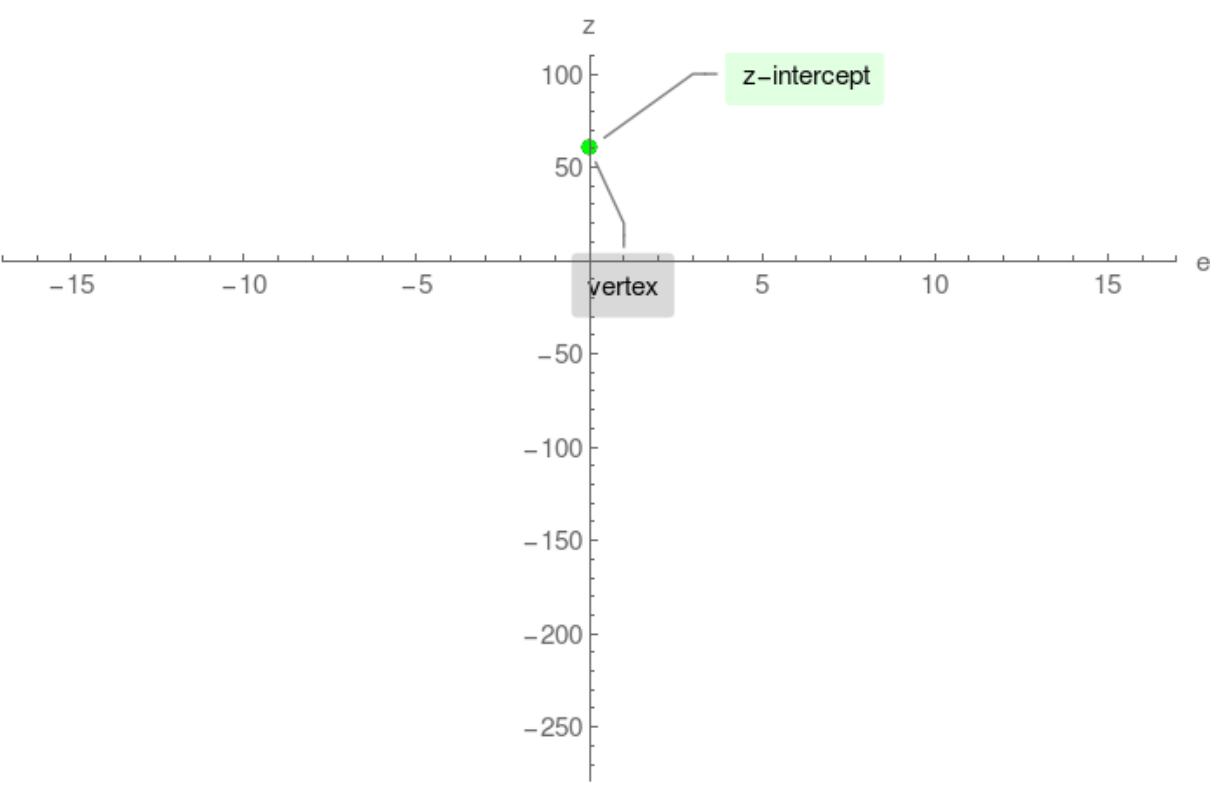
vertex$=(0,60)$



Step 2.

Compute z−intercept and plot single point:

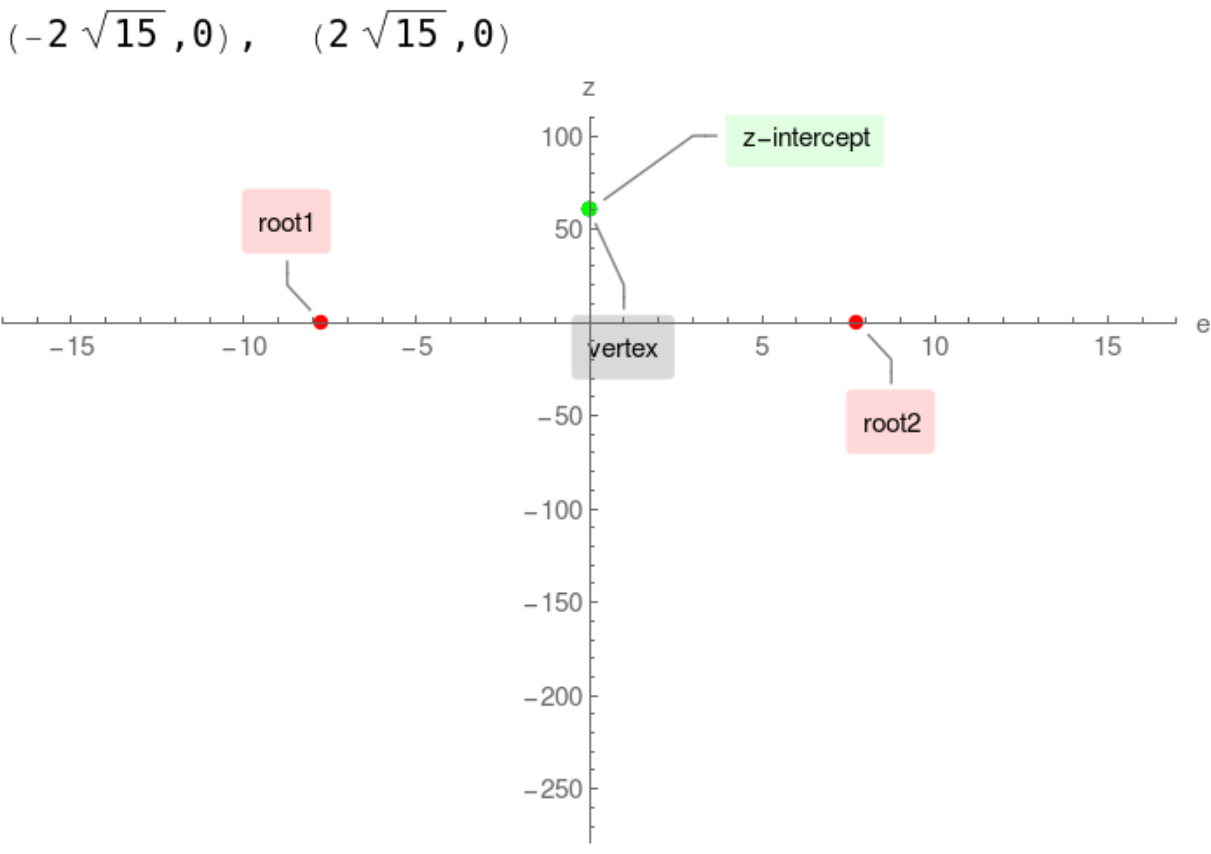
z−intercept$=(0,60)$



Step 3.

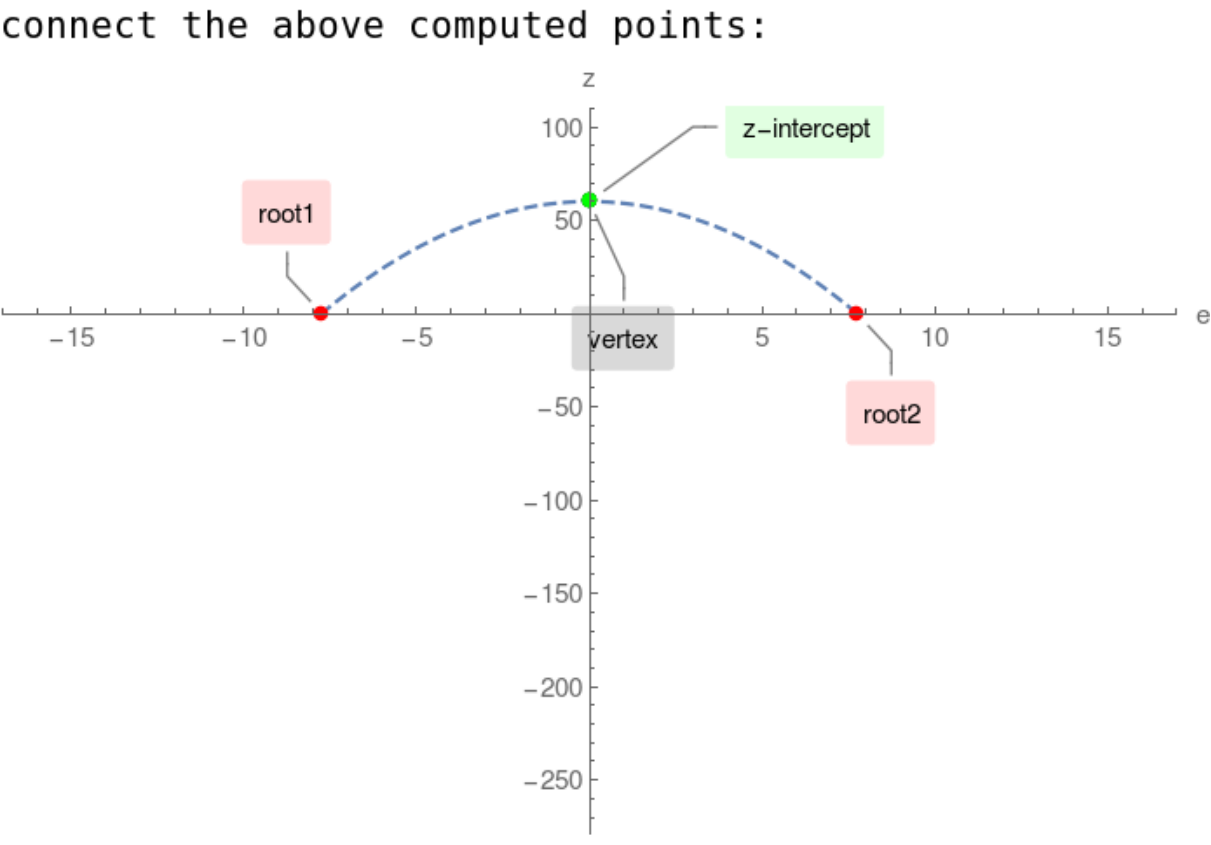
Compute e−intercepts by solving $60-e^2=0$:

$(-2\sqrt{15},0)$, $(2\sqrt{15},0)$



Step 4.

connect the above computed points:



Step 5.

Extend the parabola beyond the range of intercepts