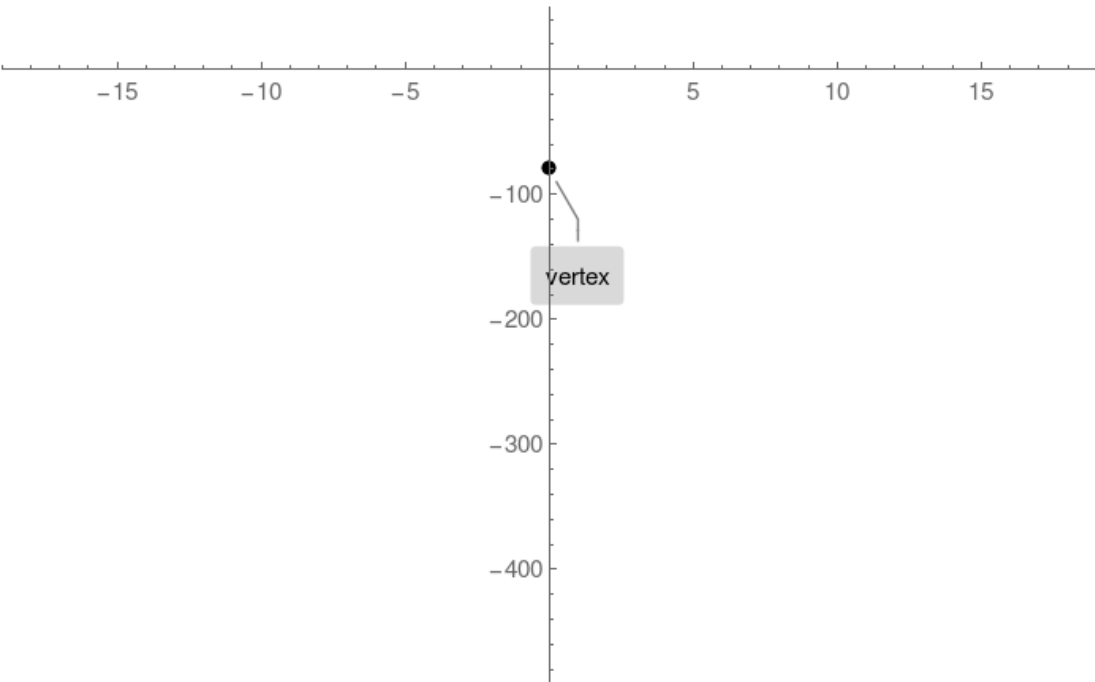# Example 3. Vertex equal to vertical intercept

Plot $d(v) = -v^2 - 80$

Step 1.
Compute vertex and plot single point:
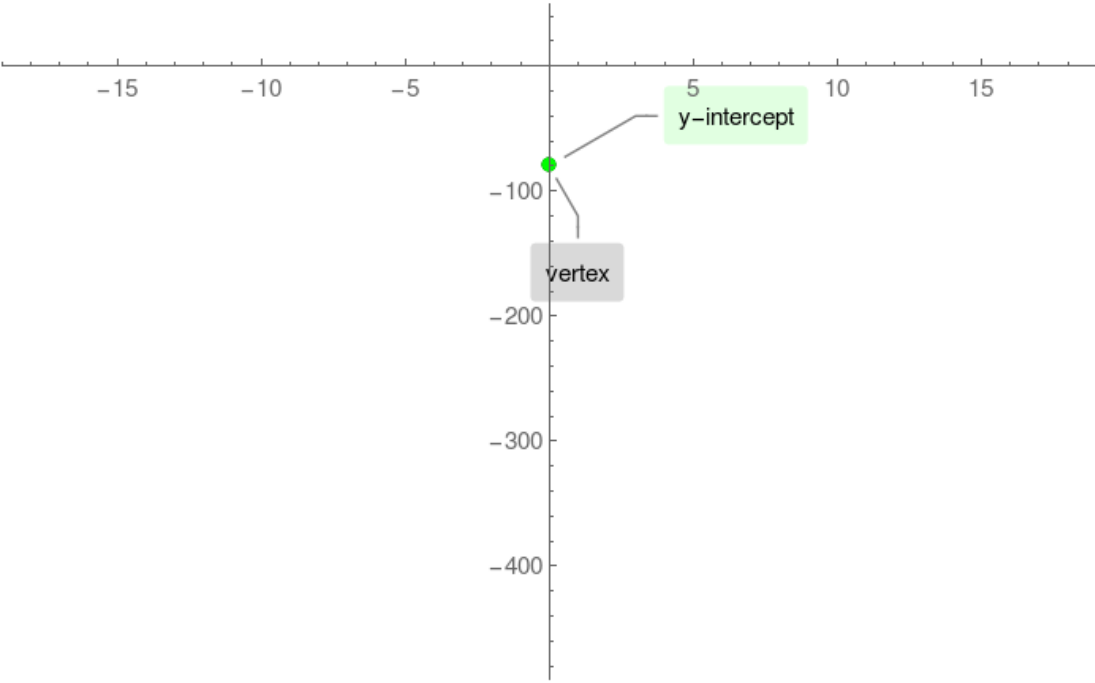vertex = $(0, -80)$

Step 2.
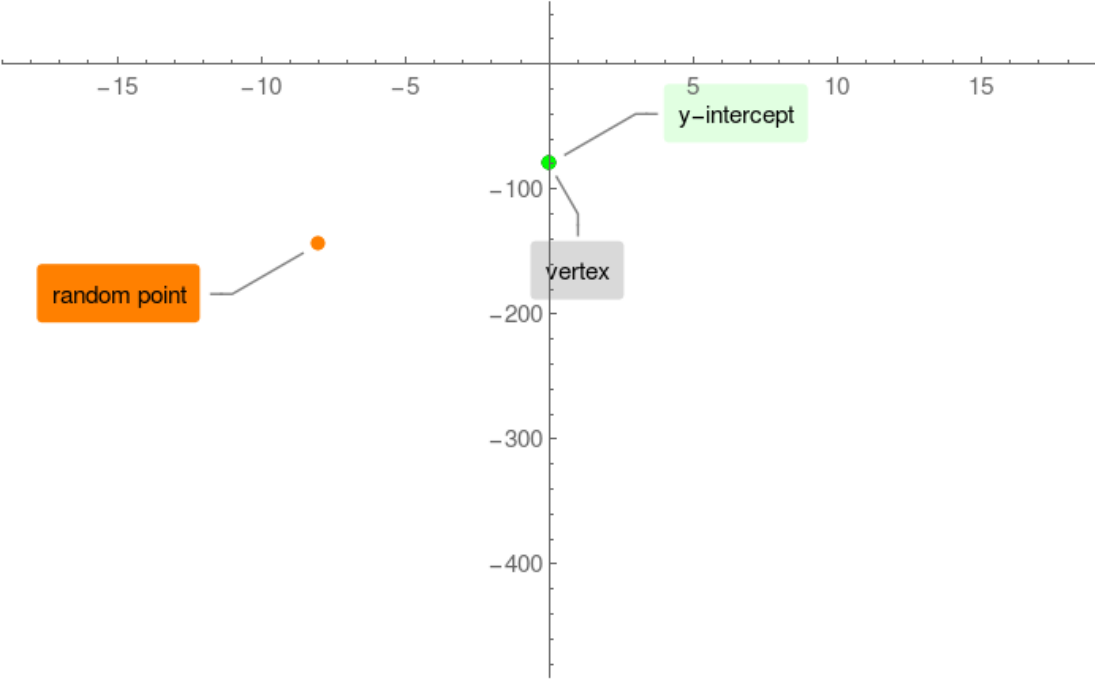Compute d-intercept and plot single point:
d-intercept = $(0, -80)$

Step 3.
There are no v-intercepts!
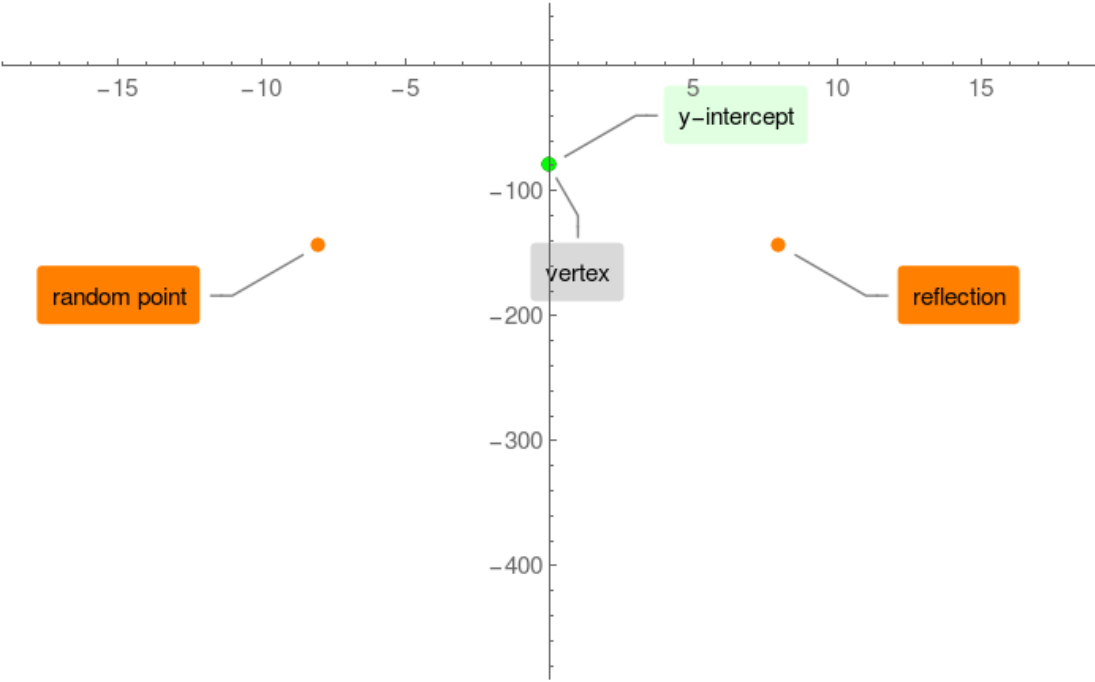Instead compute an arbitrary point on any side of vertex:
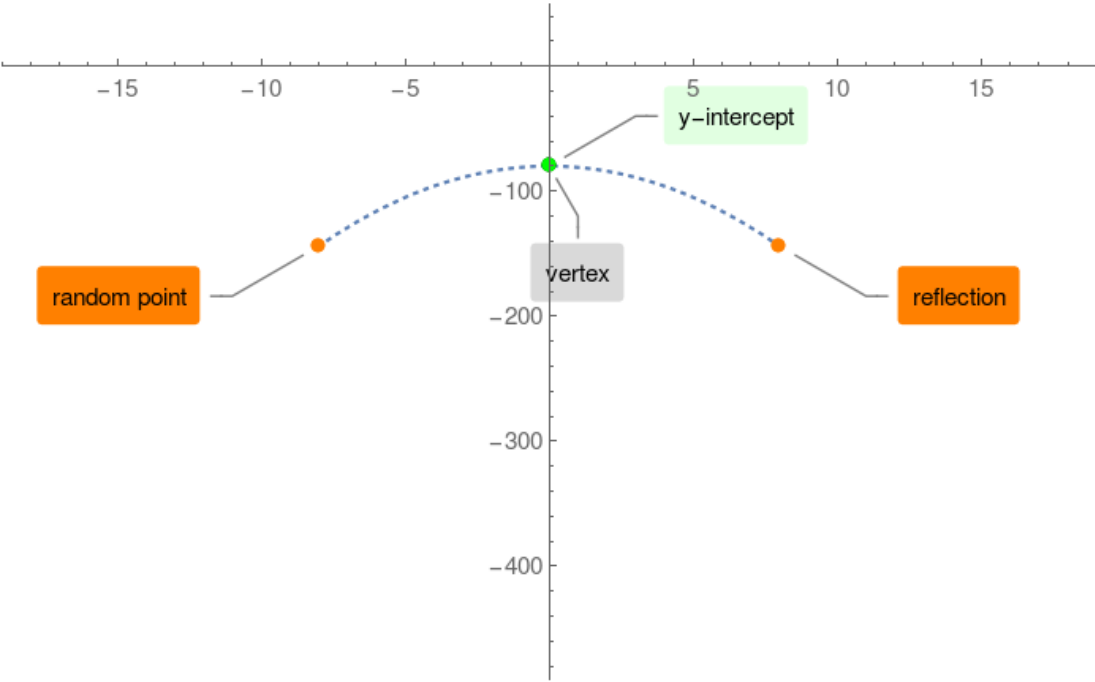Random point = $(-8, -144)$

Step 4.
Reflect the point against the vertex's vertical axes:
Reflection = $(8, -144)$

Step 5.
connect the above computed points:

Step 6.
Extend the parabola beyond the range of intercepts