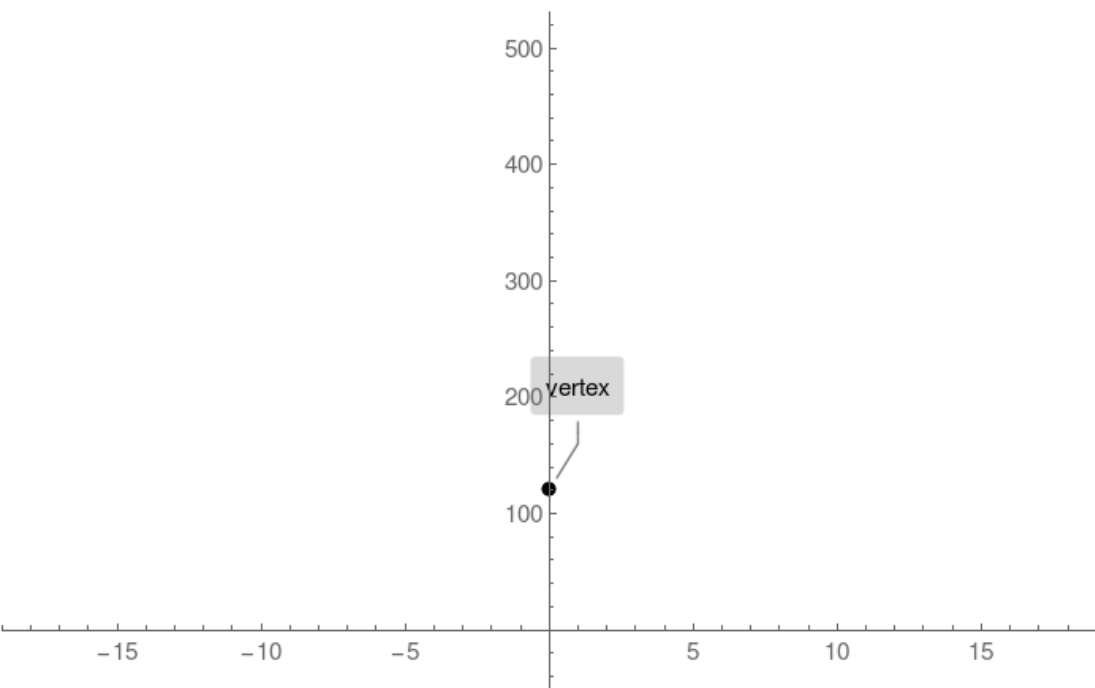# Example 3. Vertex equal to vertical intercept

Plot $v(r) = r^2 + 120$

Step 1.
Compute vertex and plot single point:
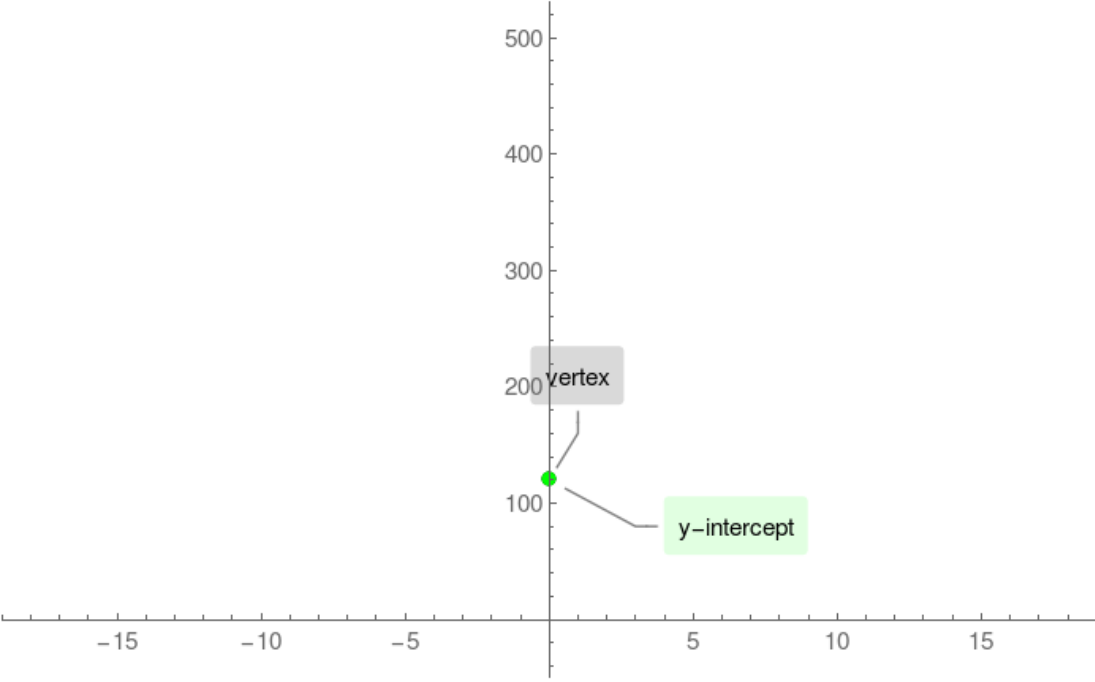vertex = (0,120)

Step 2.
Compute v-intercept and plot single point:
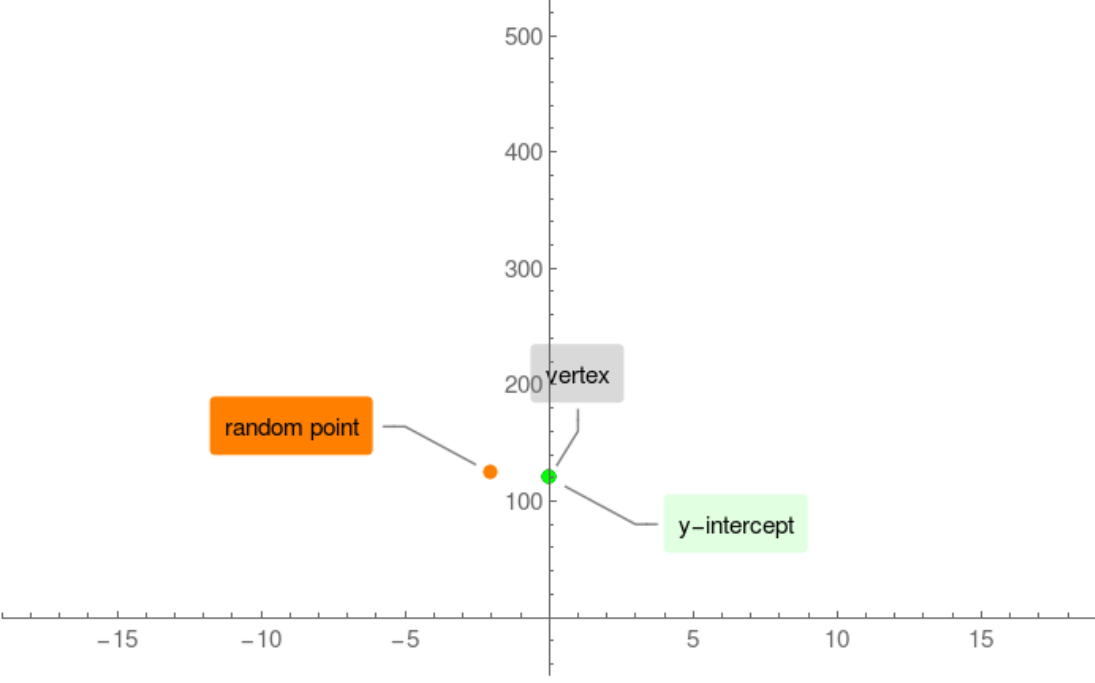v-intercept = (0,120)

Step 3.
There are no r-intercepts!
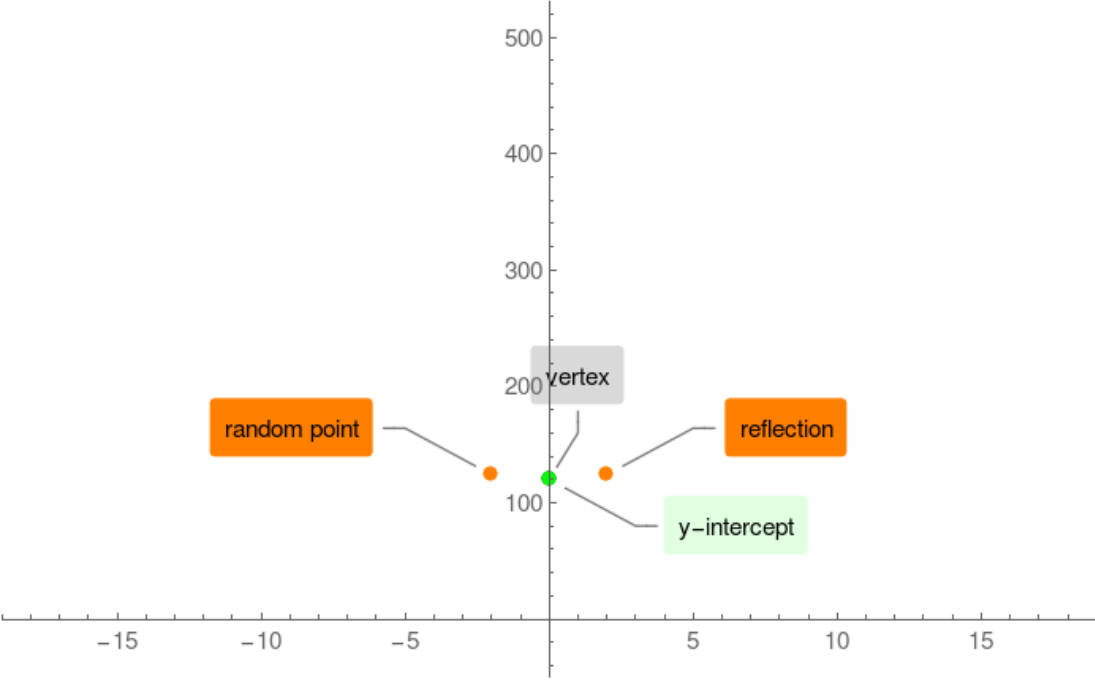Instead compute an arbitrary point on any side of vertex:
Random point = (-2,124)
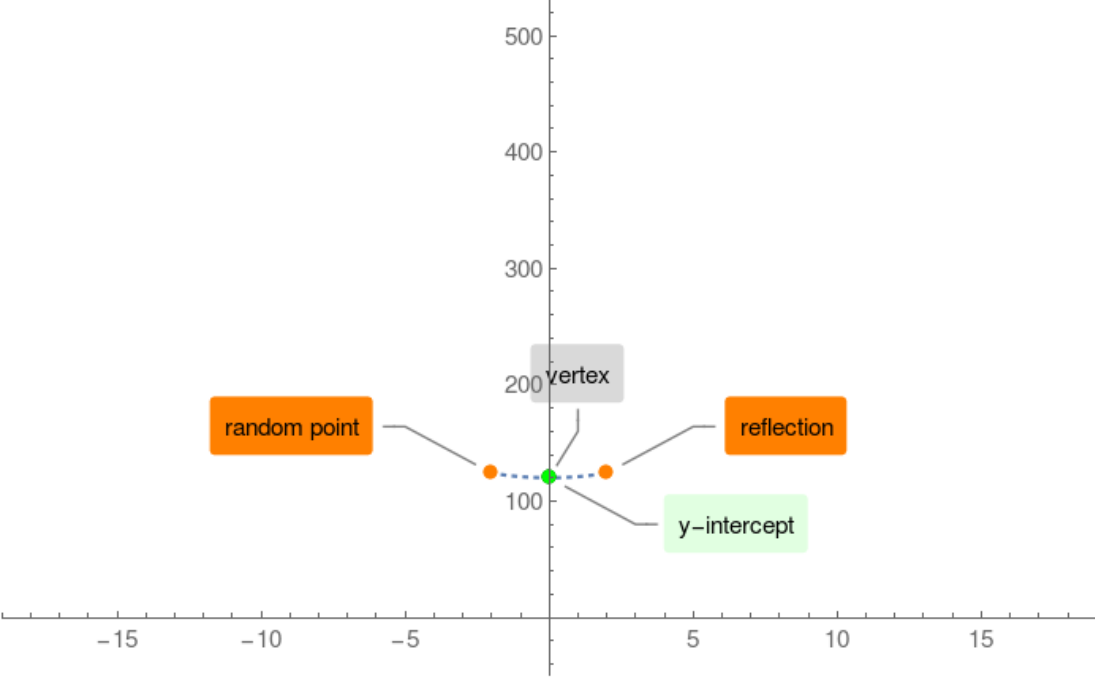

Step 4.
Reflect the point against the vertex's vertical axes:
Reflection = (2,124)

Step 5.
connect the above computed points:

Step 6.
Extend the parabola beyond the range of intercepts