

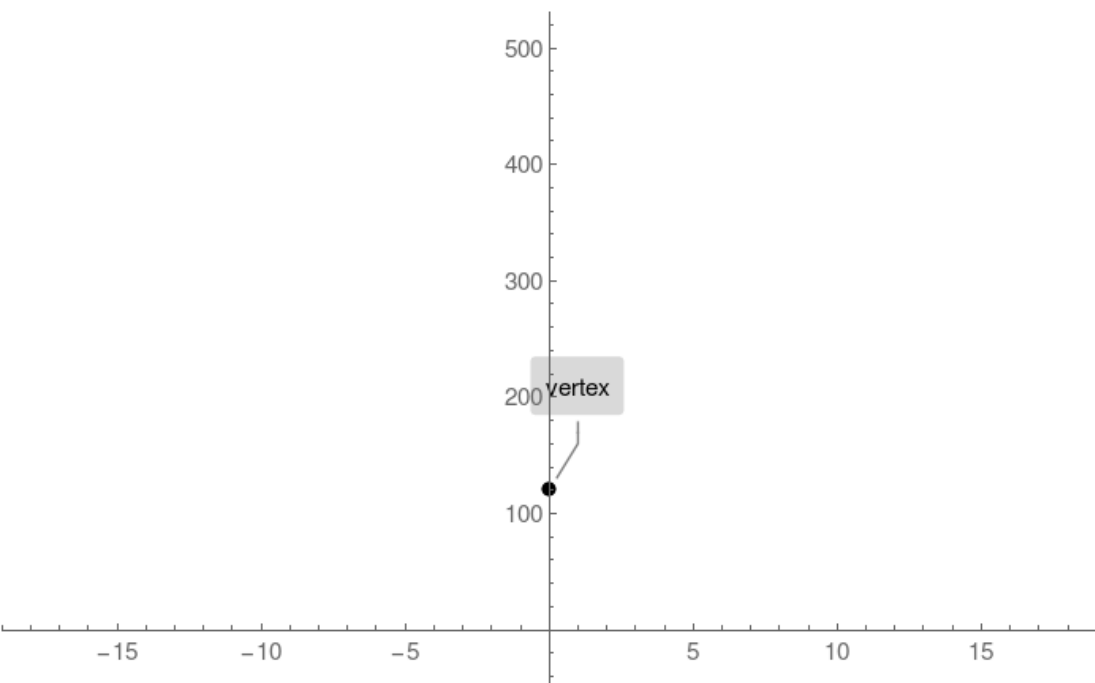
### Example 3. Vertex equal to vertical intercept

Plot  $e(n) = n^2 + 120$

#### Step 1.

Compute vertex and plot single point:

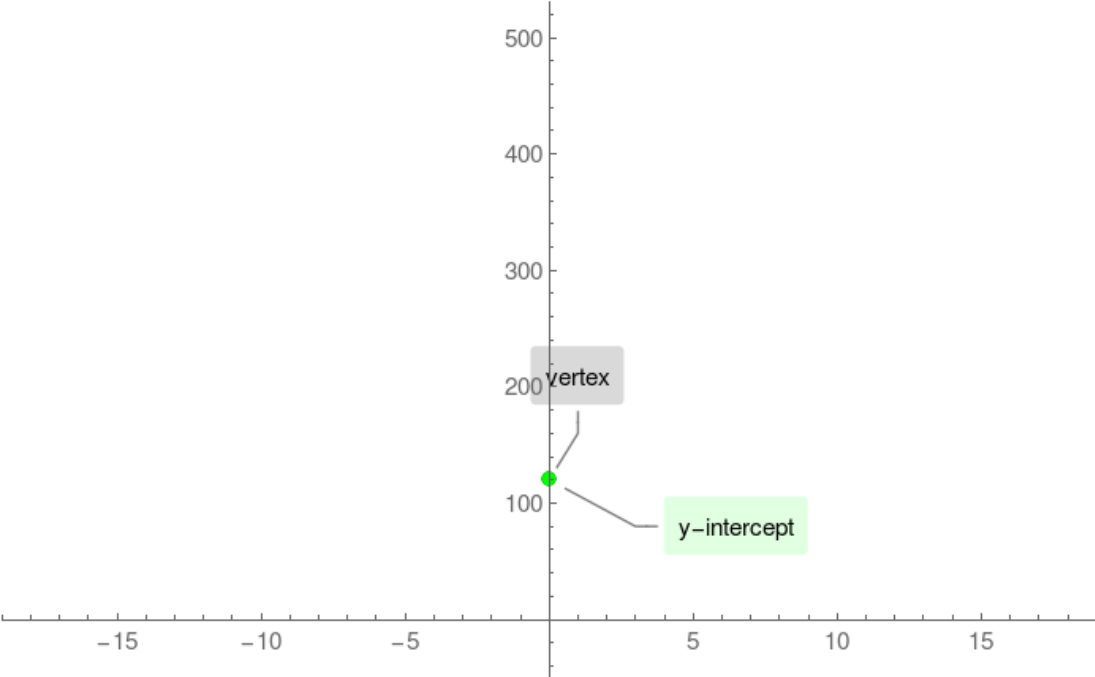
vertex = (0,120)



#### Step 2.

Compute e-intercept and plot single point:

e-intercept = (0,120)

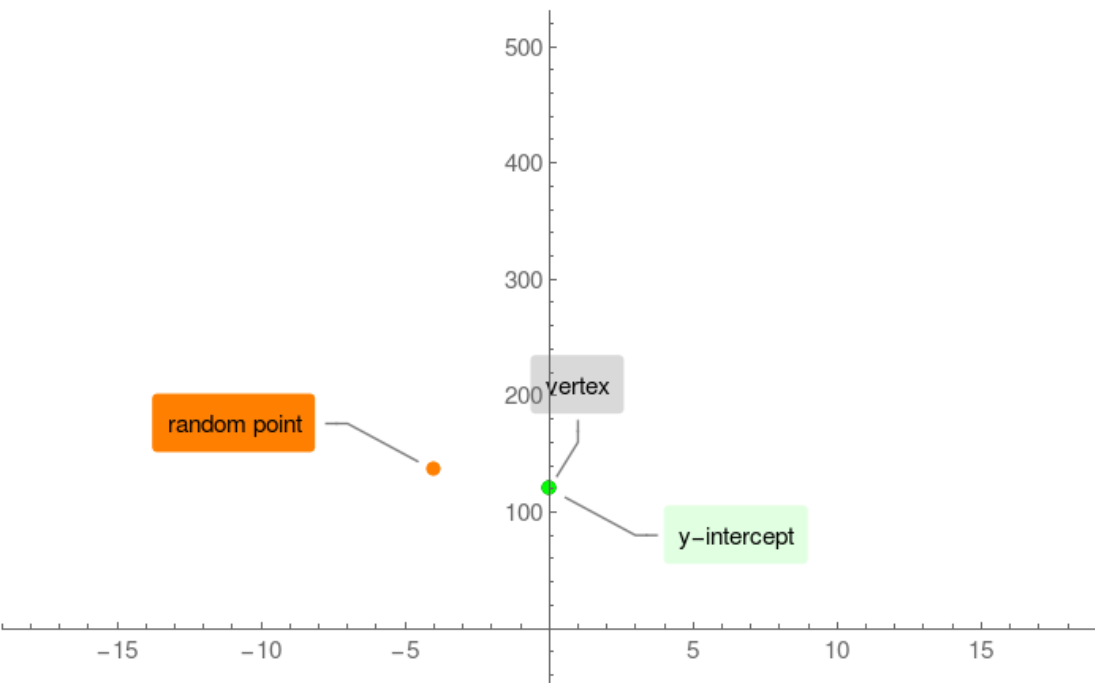


#### Step 3.

There are no n-intercepts:

Instead compute an arbitrary point on any side of vertex:

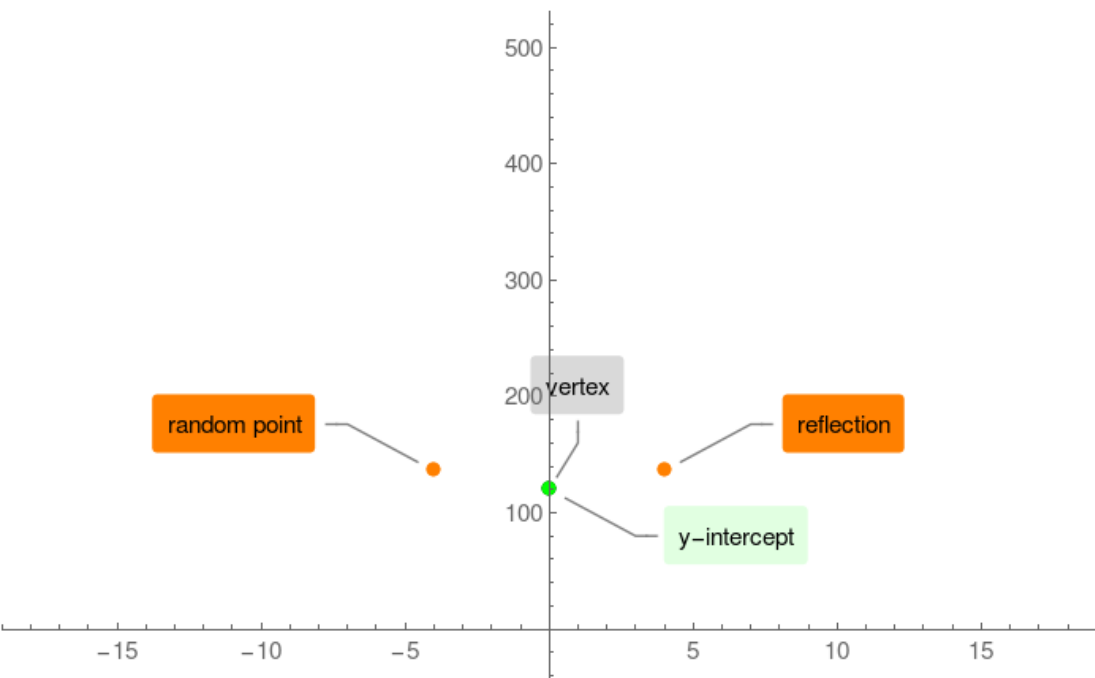
Random point = (-4,136)



#### Step 4.

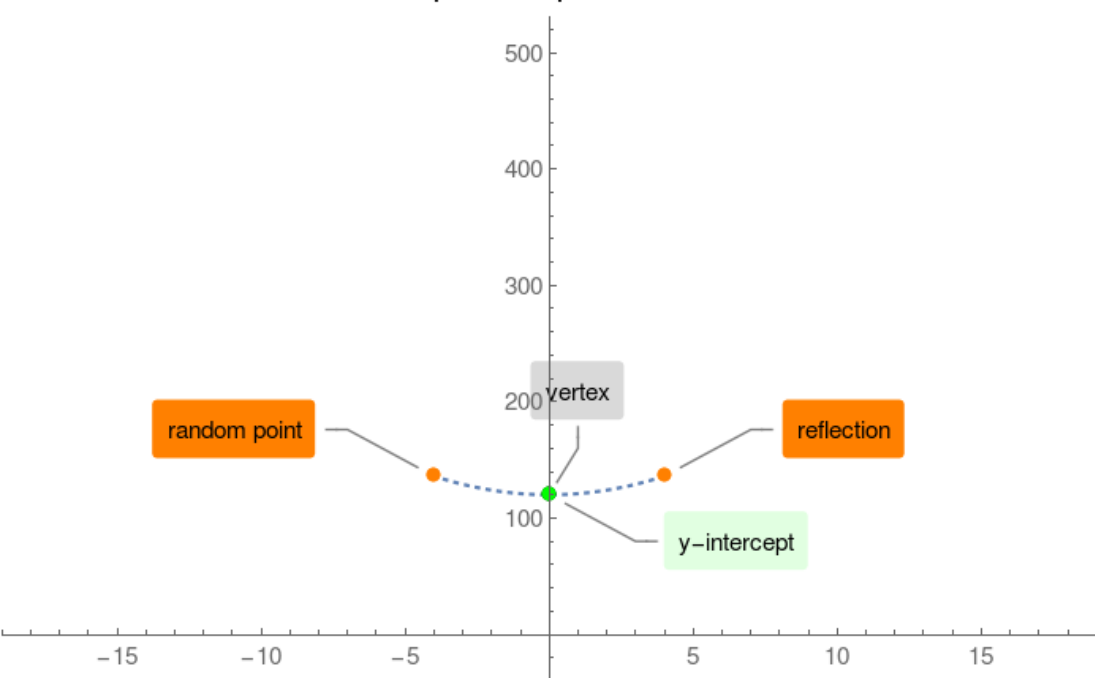
Reflect the point against the vertex's vertical axes:

Reflection = (4,136)



#### Step 5.

connect the above computed points:



#### Step 6.

Extend the parabola beyond the range of intercepts

