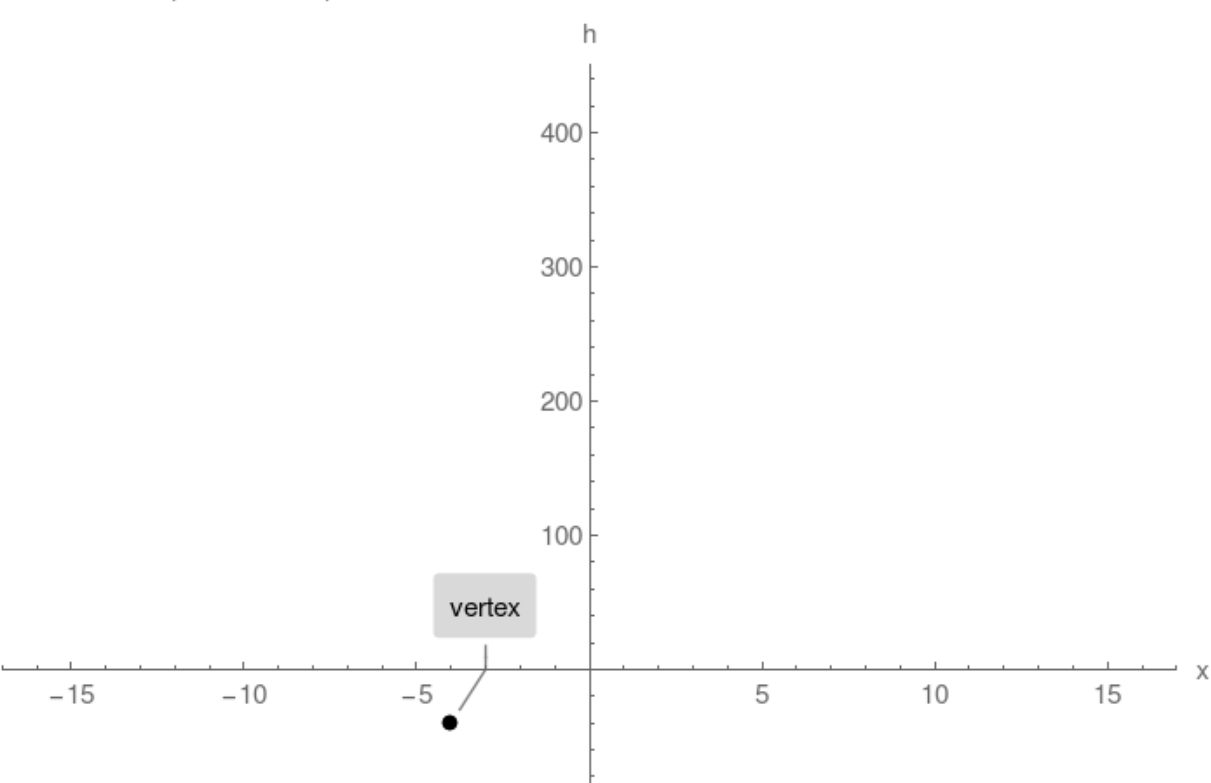# Example 1. 2 horizontal intercepts found

Plot $h(x) = x^2 + 8x - 24$

Step 1.
Compute vertex and plot single point:
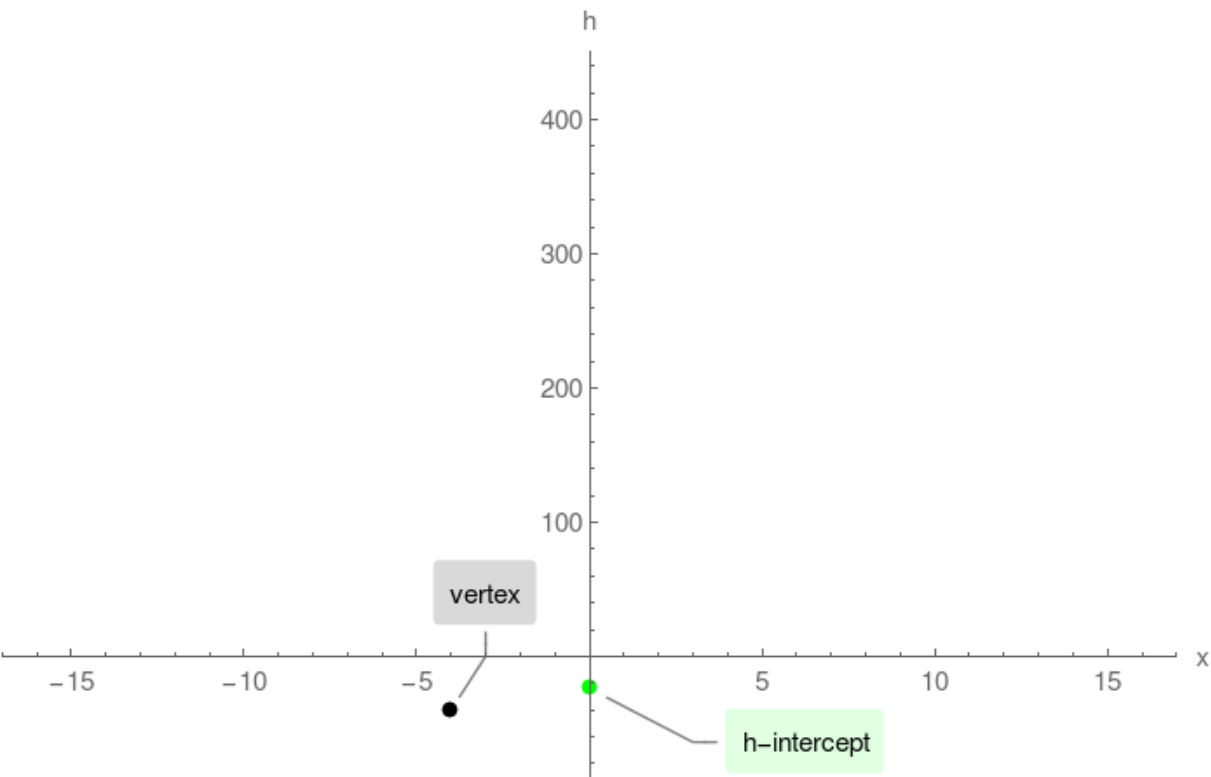vertex $= (-4, -40)$

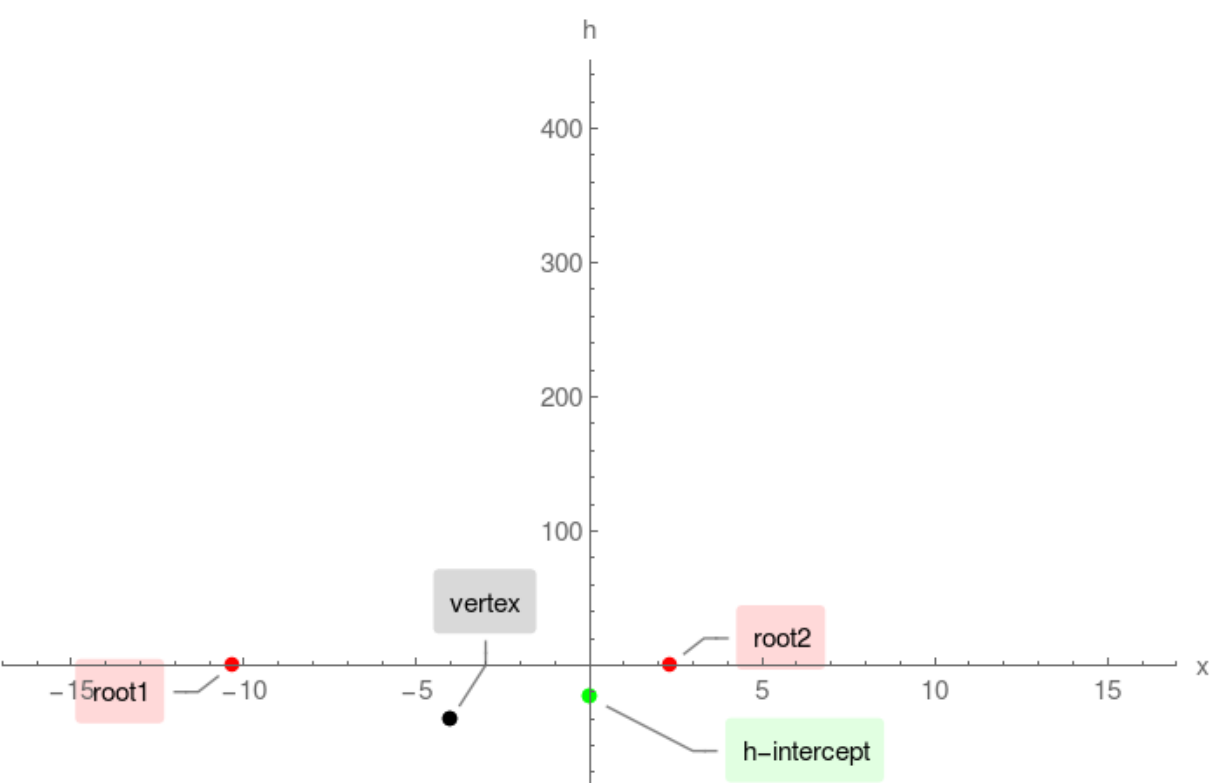**Step 2.**
Compute h-intercept and plot single point:
h-intercept $= (0, -24)$

Step 3.
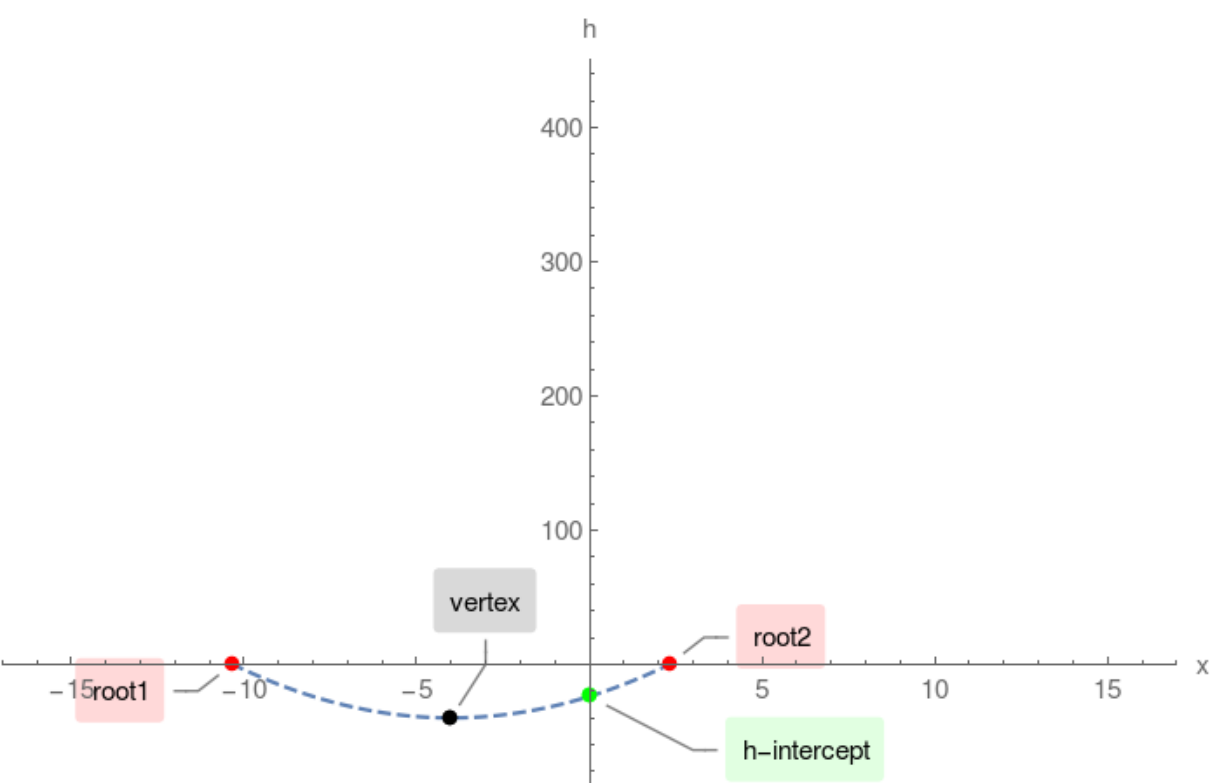Compute x-intercepts by solving $x^2 + 8x - 24 = 0$:
$(-4 - 2\sqrt{10}, 0)$, $(-4 + 2\sqrt{10}, 0)$

Step 4.
connect the above computed points:

Step 5.
Extend the parabola beyond the range of intercepts