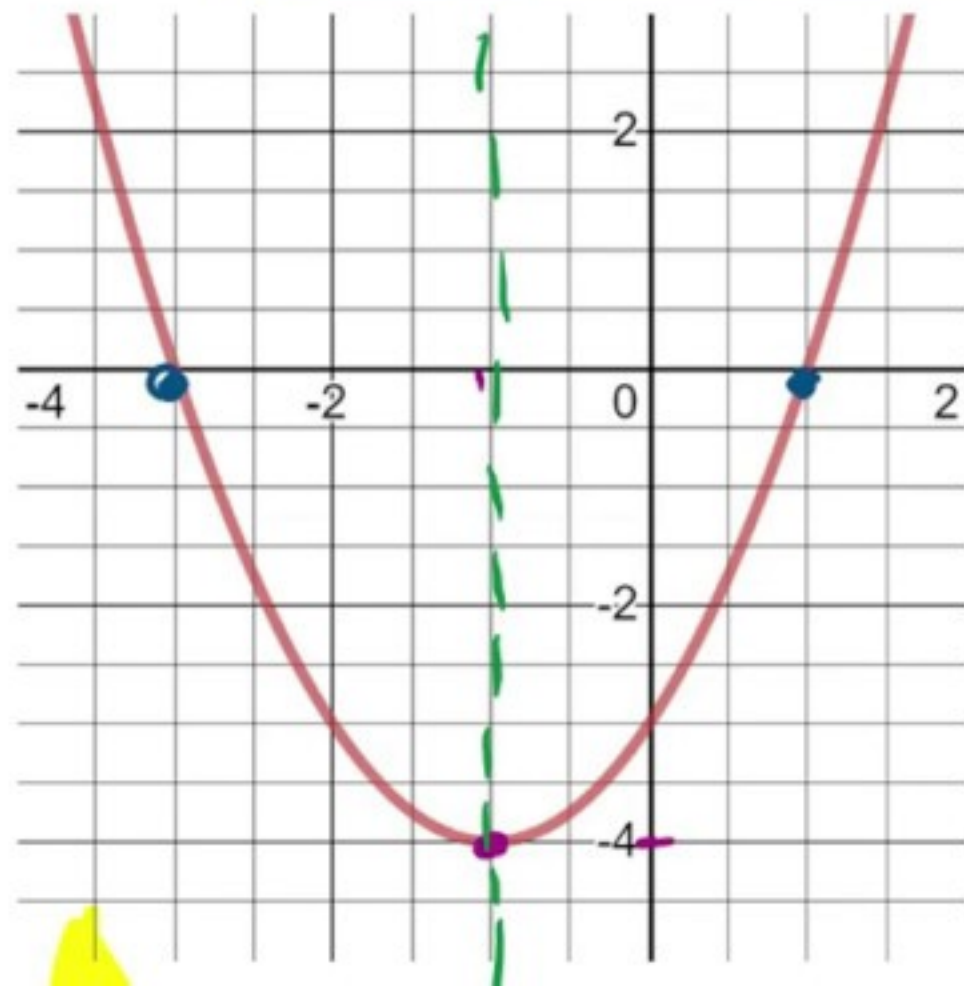


Intercepts and Vertex from Graph

Q1. Find y-intercept, x-intercept and the vertex from the given graph.

Verify that the equation of the axis is average value of x-intercepts.



Vertex $(-1, -4)$
 Eqn. of axis $x = -1$

x-int. : $x_1 = -3$; $x_2 = 1$

$$x = \frac{x_1 + x_2}{2} = \frac{-3 + 1}{2} = \frac{-2}{2} = -1$$

Axis is $x = -1$