

MTH 201 -- Calculus

Module 7A: Extreme values and critical numbers

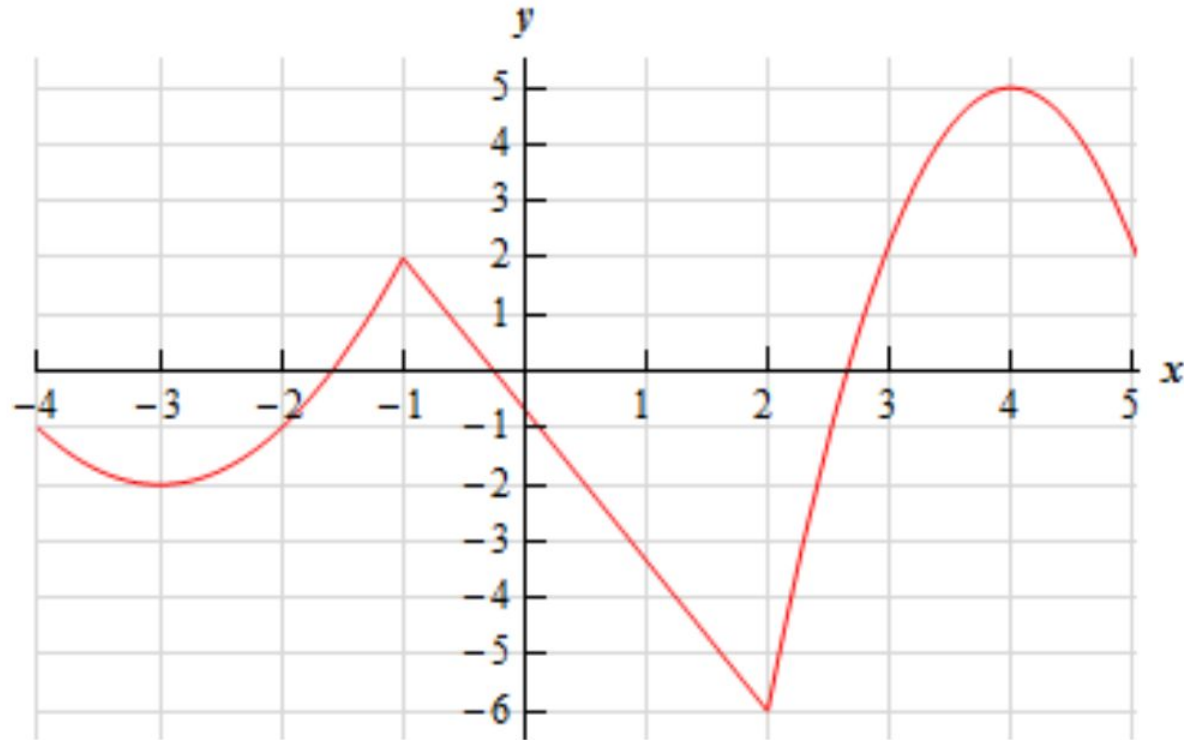
October 19-20, 2020



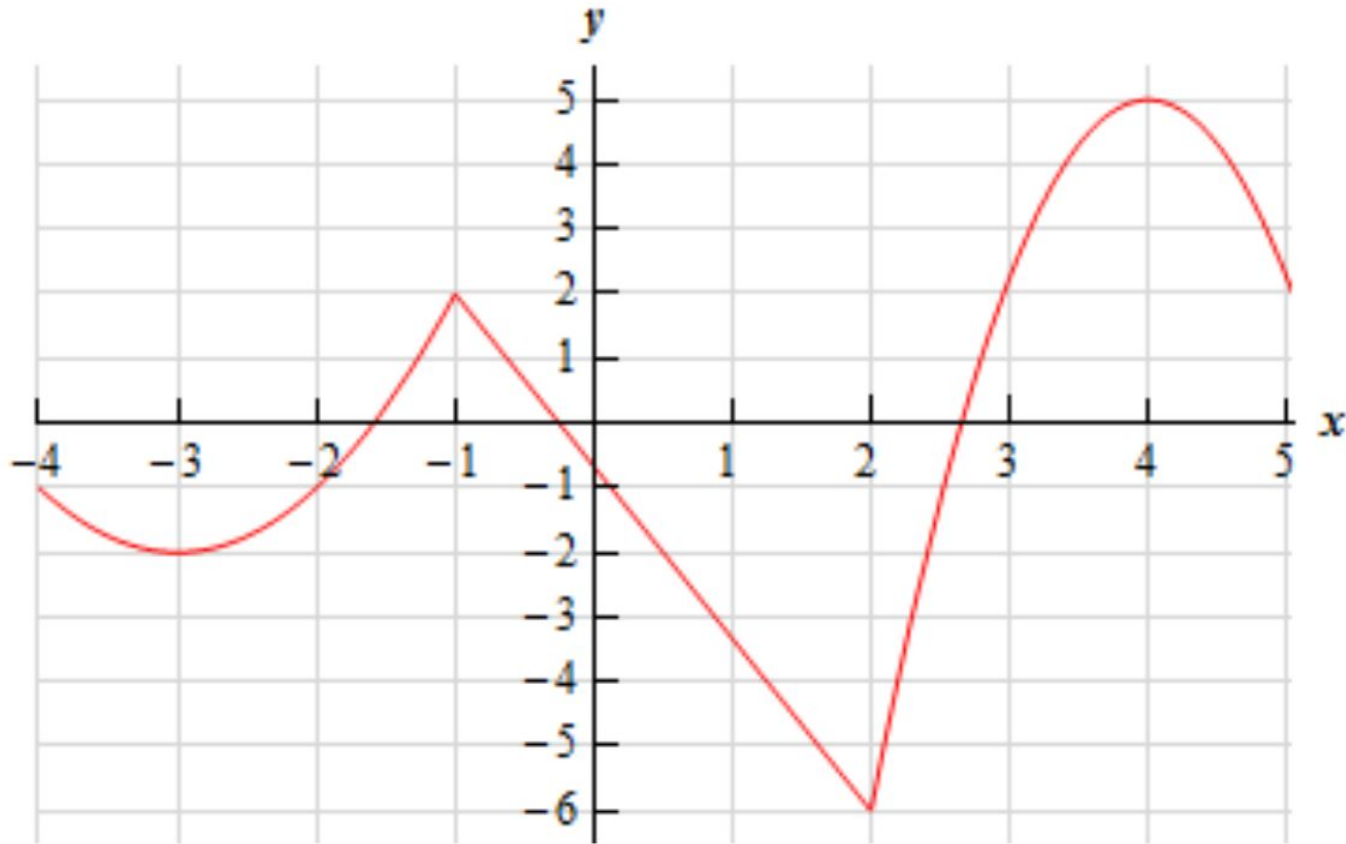
Agenda for today

- Polling activity over Daily Preparation + Q&A time
- Activity: Finding critical numbers and applying the First Derivative Test
- Q/A + Feedback time

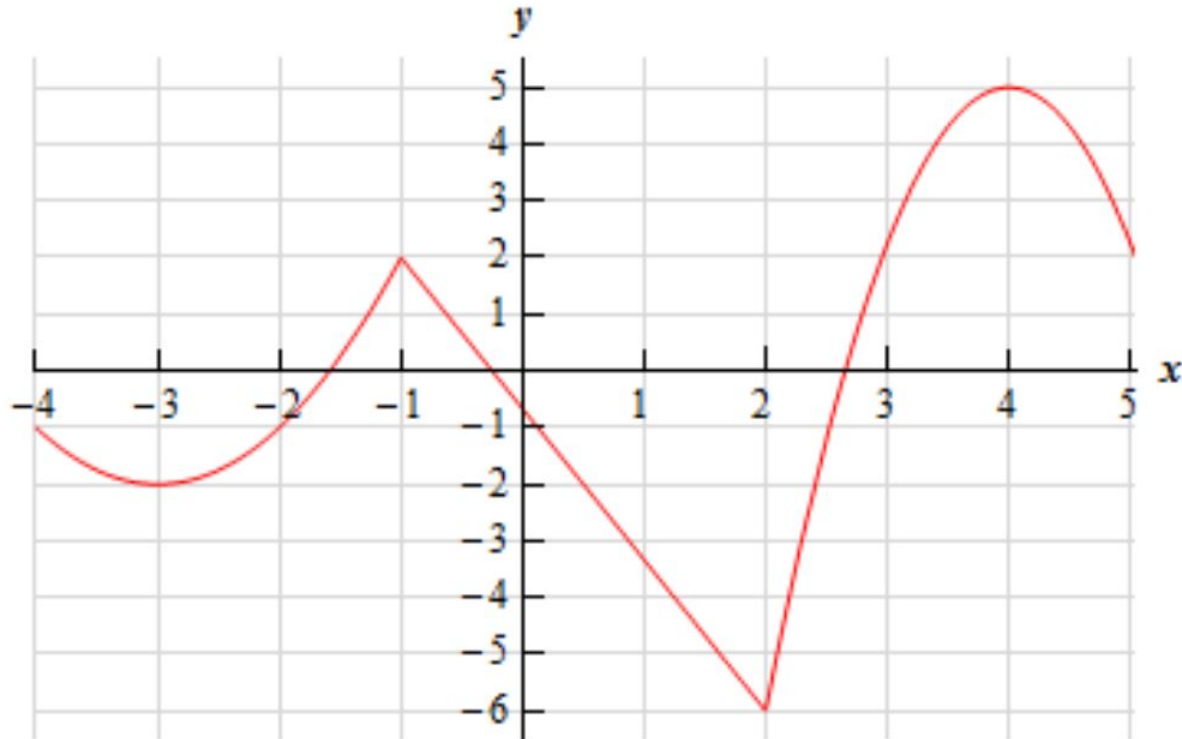
Click on all the **RELATIVE MAXIMUMS** of this function.



Click on all the **ABSOLUTE MINIMUMS** of this function.

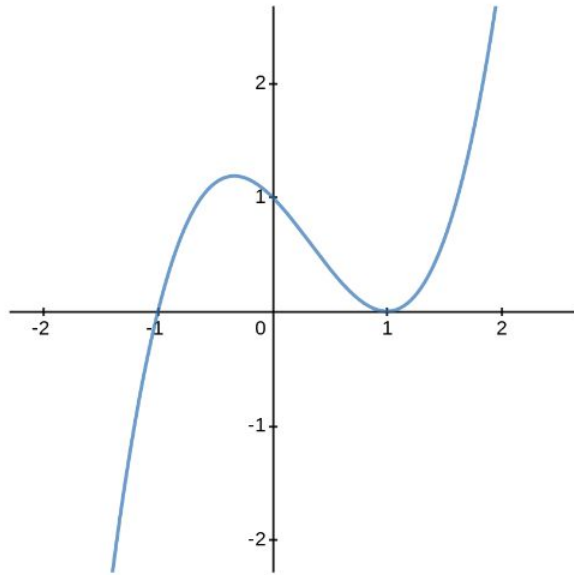


Click on all of the points of this graph where there is a **CRITICAL NUMBER** (or critical value).



**Practice at Jamboard with a
minilecture about sign charts**

Shown here is the graph of $g'(x)$ -- the **DERIVATIVE** of another function $g(x)$. What can we conclude about the original, unseen function $g(x)$? Select all that apply.



g has critical values at $x = -1, +1$

g has a local minimum at $x = 1$

g has a local minimum at $x = -1$

g has a local maximum between $x = -1$ and $x = 0$

g has a critical value at $x = 1$ that is not a local extreme value



To 0