

**Extreme Value Theorem**

If the function  $f$  is continuous on the closed interval  $[a, b]$ , then the absolute extrema of the function  $f$  on the closed interval will occur at the endpoints or critical values of  $f$ .

\*After identifying critical values, create a table with endpoints and critical values. Calculate the  $y$  – value at each of these  $x$  values to identify the extrema.