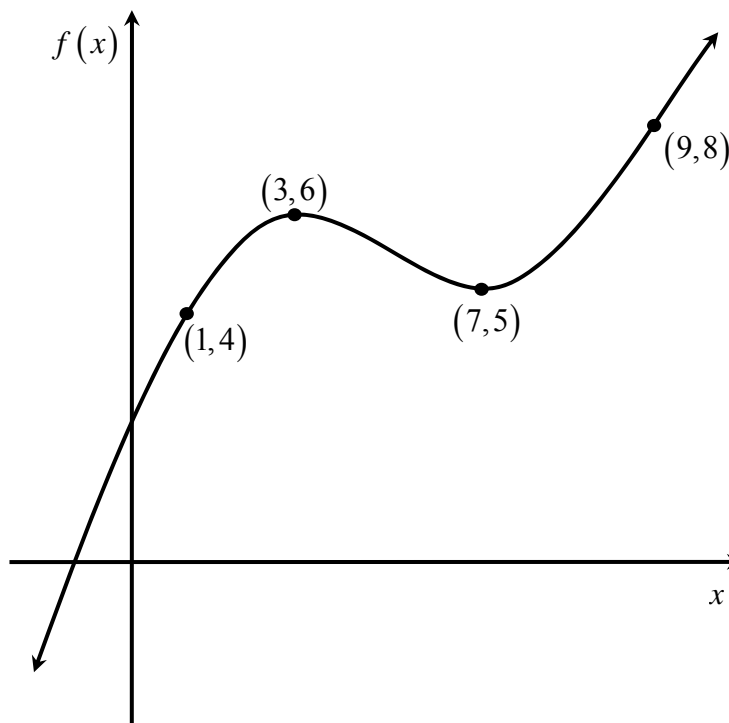


Math 263A Class Drill 6: Relative and Absolute Extrema

The *Extreme Value Theorem* says that a function f that is continuous on a closed interval $[a,b]$ will have both an absolute maximum and an absolute minimum on that interval. In this drill, you will investigate what can happen when the interval is not closed.

The graph of a function f is shown at right. Fill in the table below.



Interval	Local Maxima in that interval	Local Minima in that interval	Absolute Maxima in that interval	Absolute Minima in that interval
$[1,9]$				
$[1,9)$				
$(1,9]$				
$[3,9]$				
$(3,9)$				
$(-\infty, \infty)$				