

$$f(x) = x^3 - 3x^2 - 1$$

$$f'(x) = 3x^2 - 6x = 0 \quad 3x(x-2) \quad x = 0 \text{ \& } 2$$

$$f''(x) = 6x - 6 = 0 \quad 6(x-1) \quad x = 1$$

	$f(x)$	$f'(x)$	$f''(x)$	
$(-\infty, 0)$		+	-	
$x = 0$	-1	0	-	$(0, -1)$ Rel. Max
$(0, 1)$		-	-	
$x = 1$	-3	-3	0	$(1, -3)$ PofI
$(1, 2)$		-	+	
$x = 2$	-5	0	+	$(2, -5)$ Rel. Min
$(2, \infty)$		+	+	

