

18.1.

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$$f'(x) = (x+2)^2(x+1)(x-1)^3(x-3)^2(x-5)$$

		-2		-1		1		3		5	
$(x+2)^2$	+	0	+	+	+	+	+	+	+	+	+
$x+1$	-	-	-	0	+	+	+	+	+	+	+
$(x-1)^3$	-	-	-	-	-	0	+	+	+	+	+
$(x-3)^2$	+	+	+	+	+	+	+	0	+	+	+
$x-5$	-	-	-	-	-	-	-	-	-	0	+
$f'(x)$	-	0	-	0	+	0	-	0	-	0	+
$f(x)$											

- (a) local maximum, ~~NONE~~ $x=1$
- (b) local minimum, $x=-1, 5$