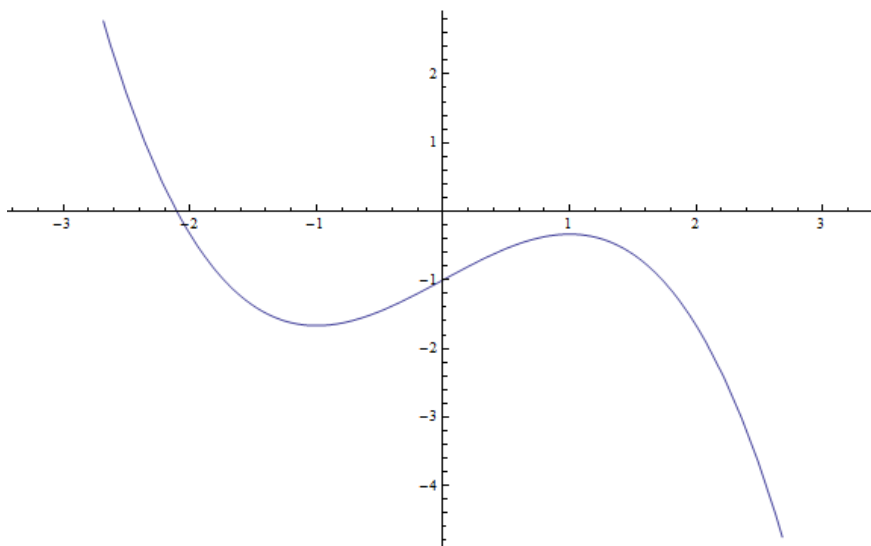


1. Critical numbers: $x = -1, 1$
 Absolute maximum at $(2, 40)$
 Absolute minimum at $(1, -19)$
2. Local minimum at $x = \sqrt[3]{3/2}$
 Local maximum: none on the given domain
3. (a) $x = -2, -1$
 (b) $(-\infty, -2)$ and $(-1, \infty)$
 (c) $(-2, -1)$
 (d) Local maximum at $x = -2$
 Local minimum at $x = -1$

4.



5.

	y'	y''
P	+	-
Q	0	-
R	-	0
S	0	+
T	+	+

6. (a)

	$(-\infty, -1)$		$(-1, \infty)$	
f'	-		+	
	$(-\infty, -2)$	$(-2, -1)$	$(-1, 0)$	$(0, \infty)$
f''	-	+	+	-

(b) An example is as follows.

