## Curve graphing worksheet (End of Chapter 2!)

Study and graph each function f(x) as we did in class.

Name:

- **1.** Let  $f(x) = e^{\sin(x)} + 1$ .
  - **1.1.** Study the function's form, symmetries, periodicity, domain and range, etc.

1.2. Study the derivative

**1.3.** Study the second derivative

	X					
	f(x)					
f	<sup>:</sup> '(x)					
f	''' (x)					

**1.4.** Build a table of all the important information.



**1.5.** Plot your function on the grid below. Indicate major points of interest on the graph.

- **2.** Let  $f(x) = \frac{x^2 1}{x^2 + 1}$ .
  - **2.1.** Study the function's form, symmetries, periodicity, domain and range, etc.

2.2. Study the derivative

2.3. Study the second derivative

**2.4.** Build a table of all the important information.

X					
<i>f</i> ( <i>x</i> )					
f'(x)					
f''(x)					

**2.5.** Plot your function on the grid below. Indicate major points of interest on the graph.

