Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Curve Sketching Quiz**

Sketch the graph of the function: $f\left(x\right)=\frac{x^{2}}{(x-2)^{2}}$ and label all relative extrema as well as inflection points.

*Hint: Use Mathematica (or Wolfram Alpha) to help you find the first and second derivatives, critical and possible inflection points, the graph, etc.*

1. Domain:
2. Asymptotes:
	1. v.a.:
	2. h.a.:

1. $f^{'}\left(x\right)=$

$f^{''}\left(x\right)=$

1. Critical points:

Possible infl. pts:

1. Setting up the table

|  |  |
| --- | --- |
|  |  |
| $$f'$$ |  |  |  |  |
| $$f^{''}$$ |  |  |  |  |
| $$f$$ |  |  |  |  |

1. Find zeros:
2. Find y-intercept:
3. Evaluate f