Curve Sketching

Curve Sketching Guidelines

- *Determine the Domain and Range of the function*
- *Determine the x-intercepts and y-intercepts of the function*
- *Determine the vertical and horizontal asymptotes if there are any.*
- *Determine the intervals of increasing and decreasing.*
- *Determine the local max and local min values of the function.*
- *Determine the intervals of concavity and possible inflection points.*

Use the curve sketching guidelines to sketch the following curves.

1. $f(x) = x^3 - 6x^2 + 9x$

2. $f(x) = \frac{1-x}{1+x}$

3. $f(x) = 2\sqrt{x} - x$

4. $f(x) = \sin(x) - \tan(x)$