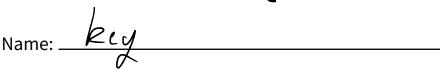
MATH 118: Quiz 4



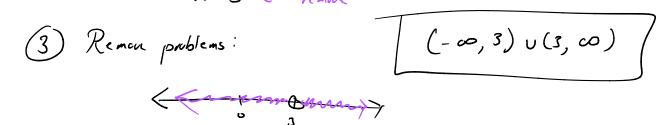
Directions:

- * Show your thought process (commonly said as "show your work") when solving each problem for full credit.
- * If you do not know how to solve a problem, try your best and/or explain in English what you would do.
- * Good luck!
- 1. What is the domain of the following function?

$$f(x) = \frac{1}{x-3}$$
(1) Start with R

2) Problems: can't divide by 2000
$$X-3=0$$

$$X=3 \leftarrow 100$$



2. Given f(x) = 2x - 1, evaluate and fully simplify the expression f(x + h) - f(x).

Compare
$$\int (x+h)$$
. See how $x+h$ replaces the x .

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

3. Draw the graph of the function f(x) = 2x - 1.

$$\frac{x}{-2} = \frac{f(x)}{2(-2)-1} = -5$$

$$2 \quad 2 \cdot 2 - 1 = 3$$

