Mathematics 120b
Quiz 1, September 12, 1997

1. Determine whether $f(x) = \frac{x^2+1}{x}$ is odd, even, or neither.
   1) odd
   2) even
   3) neither

   Answer:______________

2. Relative to the graph of $y = x^2$, the graph of $y = (x-2)^2$ is changed in what way?
   1) shifted 2 units up
   2) compressed vertically by the factor 2
   3) compressed horizontally by the factor 2
   4) shifted 2 units to the left
   5) shifted 2 units to the right
   6) shifted 2 units down
   7) stretched vertically by the factor 2
   8) stretched horizontally by the factor 2

   Answer:______________

3. Find the final digit in the number 312^{1997} .

1) 1	2) 2	3) 3	4) 4
6) 6	7) 7	8) 8	9) 9

   Answer:______________

4. The displacement in meters of a particle moving in a straight line is given by $s = t^2 + t$, where t is measured in seconds. Find the average velocity in meters per second over the time period $[1, 2]$.

1) 1	2) 2	3) 3	4) 4
5) 5	6) 6	7) 7	8) 8

   Answer:______________

5. Find the value of the limit $\lim_{x \to 2^+} \frac{|x-2|}{x-2}$.

1) 1	2) 2	3) $1/2$	4) 4
4) -1	5) -2	6) -4	7) $-1/2$

   Answer:______________