Quiz, January 31

1. When is the first exam?
2. Compute $\lim_{x \to 1} \dfrac{\sqrt{x} - 1}{x - 1}$.
3. $\lim_{x \to 2} \dfrac{x^2 - 4x + 4}{|x - 2|} = ?$

   Which of the following is the best answer, and why?

   (a) $+\infty$ (b) $-\infty$ (c) 0 (d) does not exist
4. Use the graph of f below to find a positive number δ such that

   $$\text{if} \quad |x - 1| < \delta, \quad \text{then } |f(x)| < 0.1.$$