Math 16A: Short Calculus I
Fall 2017, Section 3
Homework Sheet 2
Due: Friday, October 6, 2017

Submit your solutions to the following problems in lecture on the due date above. Present your work in a clean and organized fashion, either on a printed copy of this document (preferred) or a separate sheet of paper. As stated in the syllabus, late submissions will **not** be accepted.

1. Compute the following limits.

   (a) $\lim_{x \to -1} \sqrt{x^2 - 2x + 10}$

   (b) $\lim_{x \to 3} \dfrac{x^2 - 3x}{x^2 + 9}$

   (c) $\lim_{x \to 3} \dfrac{x^2 - 3x}{x^2 - 4x + 3}$

   (d) $\lim_{x \to 2} \dfrac{\sqrt{5x - 1} - 3}{x - 2}$

   (e) $\lim_{x \to 2^-} \dfrac{|3x - 6|}{\sqrt{x + 2} - 2}$

   (f) $\lim_{x \to \infty} \dfrac{8x^3 - 2x + 1}{2x^3 + 7x + 257}$

   (g) $\lim_{x \to \infty} \dfrac{x^2 - x}{27x + 2576}$