Lesson 4.3 – Continuity and L'Hôpital's Rule

1. Evaluate the following limits. Use L'Hôpital's Rule if necessary.

   (a) $\lim_{x\to 0} \frac{x^2-2x+3}{x^3+1}$

   (b) $\lim_{x\to 3} \frac{x^3-5x^2+6x}{2x^2-5x-3}$

   (c) $\lim_{x\to -2} \frac{\sqrt[3]{x^2-4}}{4x^3-10x}$

   (d) $\lim_{x\to +\infty} \frac{1-\sqrt{x}}{\sqrt{x-2}}$