For each of the following limits, determine if the limit exists as a number or does not exist. If the limit exists find its value. Neatly show ALL of your work and CLEARLY indicate your answers. Use the back of the page if necessary. (4 points each)

(a) $\displaystyle \lim_{w \to 0} \frac{(4+w)^{-1} - 4^{-1}}{w}$

(b) $\displaystyle \lim_{x \to 1} \frac{x^2 - 3x + 2}{1 - x^4}$

(c) $\displaystyle \lim_{h \to 0} \frac{\sqrt{1+h} - 1}{h}$

(d) $\displaystyle \lim_{x \to 3^+} \sqrt{3 - x}$

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