Q1]...[5 points] For the function $f$, whose graph is given below,

1. determine the following limits:
   
   (a) $\lim_{x \to 4} f(x)$.
   
   (b) $\lim_{x \to 2} f(x)$.
   
   (c) $\lim_{x \to -2} f(x)$.

2. find, if any, the vertical asymptotes to the graph of the function $y = f(x)$. Justify your answer.
Q2]...[5 points] Evaluate the limit or show that it does not exist.

1. \[ \lim_{x \to -3} \frac{(x+2)|x+3|}{(x+3)}. \]

2. \[ \lim_{x \to 1} e^{[x]}, \text{ where } [x] \text{ is the greatest integer less than or equal to } x. \]

3. \[ \lim_{x \to 2} \frac{\sqrt{x^7-3}}{x^3-4x}. \]

GOOD LUCK