Q1. Evaluate the limit, if it exists. Justify each step by indicating the appropriate Limit Law(s).

\[
\lim_{x \to -1} \frac{2x^2 + 3x + 1}{x^2 - 2x - 3}
\]

Q.2:- Find a number \( \delta \) such that if \( |x - 4| < \delta \) then \( |\sqrt{x} - 2| < 0.5 \)

Q3. Use limits to determine whether or not \( x = 1 \) is a vertical asymptote of \( f(x) = \frac{x^2 - 2x + 1}{2x^2 + 2x - 4} \).

Q4. What is the rate of change of the area of a circle w. r. t. the radius when the radius is 3.