Q1 (5 points) Find the vertical and horizontal asymptotes for the function 
\[ y = \frac{x^3 - 1}{x^3 - x}. \]

Q2 (5 points) The displacement (in meters) of a particle moving in a straight line is given by 
\[ s = \frac{1}{\sqrt{5-t}} \] where \( t \) is measured in seconds. Use limits to find the instantaneous velocity of the particle when \( t = 1 \).