NAME:

Show ALL your work CAREFULLY.

(a) Find the interval of convergence of the following power series [Do not forget to check the endpoints!].

\[ \sum_{n=1}^{\infty} \frac{(x - 1)^n}{\sqrt{2n}} \]

(b) Find a power series representation of the function \( f(x) = \frac{x}{1 - x^3} \). State the interval of convergence.