

NameSr.#

Q1. Let $f(x) = \frac{x^2 + x - 2}{x^2 - 3x + 2}$

- a) Find the discontinuities points and which is removable.
- b) Find the equations of vertical and horizontal asymptotes.

Q2. Find the following limits:

a) $\lim_{x \rightarrow \infty} \sqrt{x^2 + x + 1} - x$

b) $\lim_{x \rightarrow -\infty} \sqrt{x^2 + x + 1} - x$