

MAT222: Calculus II - Technique of Integration

7.8 Improper Integrals

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Introduction

Definition

A **improper integral** is an integral that has one of the following properties:

- ▶ The interval of integration is infinite.
- ▶ The integrand is infinite at one or more points in the interval of integration.

Type I - Infinite Intervals

Consider the infinite region S that lies under the curve $y = 1/x^2$, above the x -axis, and the right of the line $x = 1$.

