

Determine if each of the following improper integrals converges or diverges.

1.  $\int_2^{\infty} \frac{1}{x^3 + 2} dx$

2.  $\int_5^{\infty} \frac{1}{\sqrt{x} - 2} dx$

3.  $\int_2^{\infty} \frac{2}{\sqrt{x} + x^2} dx$

## Recap for Today

- The Comparison Theorem gives us a tool for determining whether an improper integral converges or diverges, even if we cannot find an antiderivative.

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