

Section 1-9 : Comparison Test for Improper Integrals

Use the Comparison Test to determine if the following integrals converge or diverge.

1. $\int_1^{\infty} \frac{1}{x^3+1} dx$

2. $\int_3^{\infty} \frac{z^2}{z^3-1} dz$

3. $\int_4^{\infty} \frac{e^{-y}}{y} dy$

4. $\int_1^{\infty} \frac{z-1}{z^4+2z^2} dz$

5. $\int_6^{\infty} \frac{w^2+1}{w^3(\cos^2(w)+1)} dw$

