

Improper Integrals Worksheet

Name _____

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Evaluate the following improper integrals or show that they diverge.

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

2. $\int_{-\infty}^0 \frac{dx}{1+x^2}$

3. $\int_2^5 \frac{dy}{y^2-9}$

4. $\int_{-\infty}^0 e^{3x} dx$

5. $\int_{-2}^2 \frac{dx}{x^2}$

6. $\int_0^\infty \frac{x}{e^x} dx$