

Name: \_\_\_\_\_ Sort #: \_\_\_\_\_

**Worksheet 11**  
**Improper Integrals**

MATH 2205, Fall 2018

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1.  $\int_1^{\infty} \frac{1}{z^2} \sin\left(\frac{\pi}{z}\right) dz$

2.  $\int_1^{\infty} \frac{1}{(x-1)^{1/3}} dx$

3.  $\int_{-2}^3 \frac{1}{x^4} dx$

4.  $\int_{-\infty}^{\infty} x e^{-x^2} dx$