Section 8.6 Worksheet: Improper Integrals

1. What are the distinct types of improper integrals discussed in this section?

2. What's troublesome about the following integral?

$$\int_{-1}^{1} \frac{1}{x} dx$$

3. How do limits figure into the calculation of integrals like the one above?

4. Explain the comparison test theorem in words.