REMEMBER TO HAND BEFORE THE TUTORIAL STARTS

• Applications of integrals

Problem 1 Consider a solid of revolution formed by rotating the graph of the function

$$f(x) = \frac{1}{x}$$

from x = 1 to $x = \infty$.

1. Compute its volume. Is finite?

STUDY QUESTION (no need to be solved): Is the surface finite?

Problem 2 Compute the area between the curves $f(x) = x^2 - 1$ and $g(x) = \log x$ between x = 1 to x = 10.