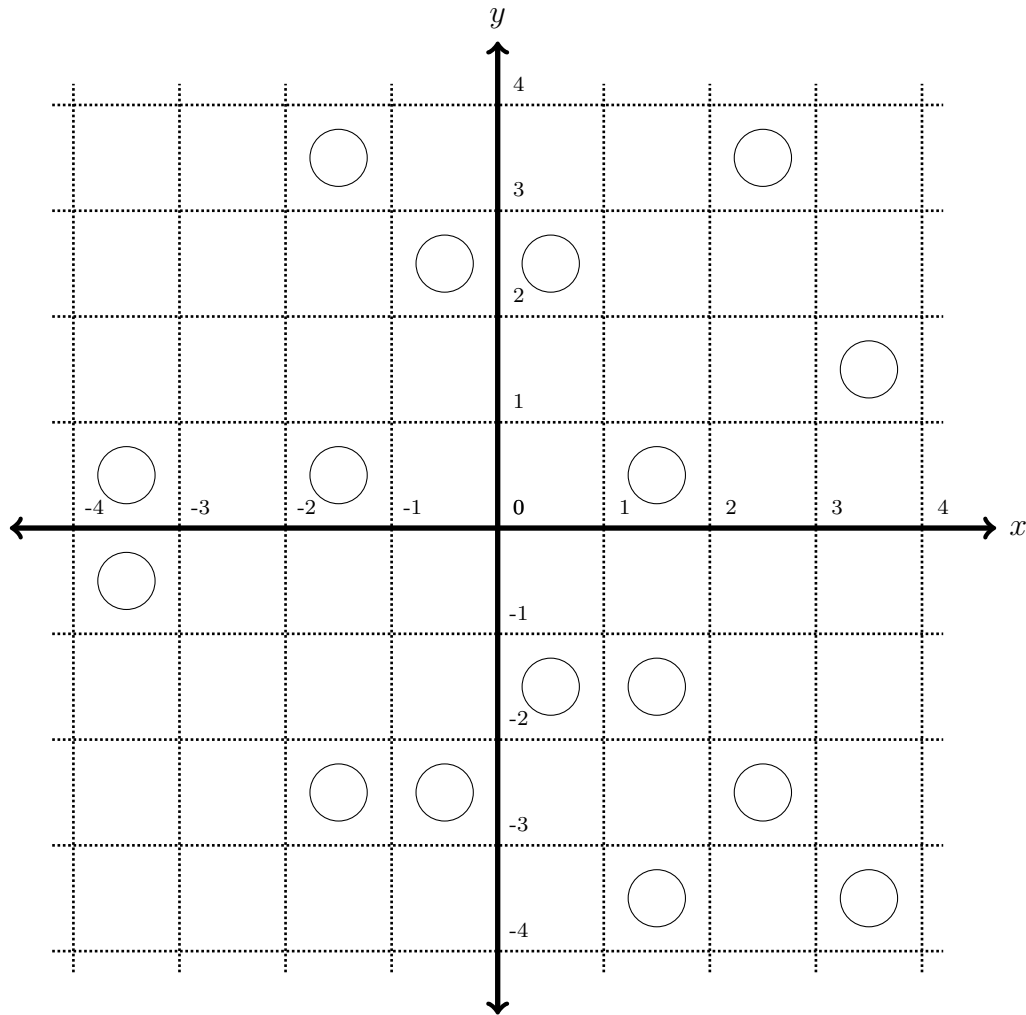


Puzzle 4: The Regions



by Jonah Ostroff

Behold: a mysterious coordinate plane and some mysterious integrals.



$$\int_0^4 \int_{-y}^0 f(x, y) dx dy$$

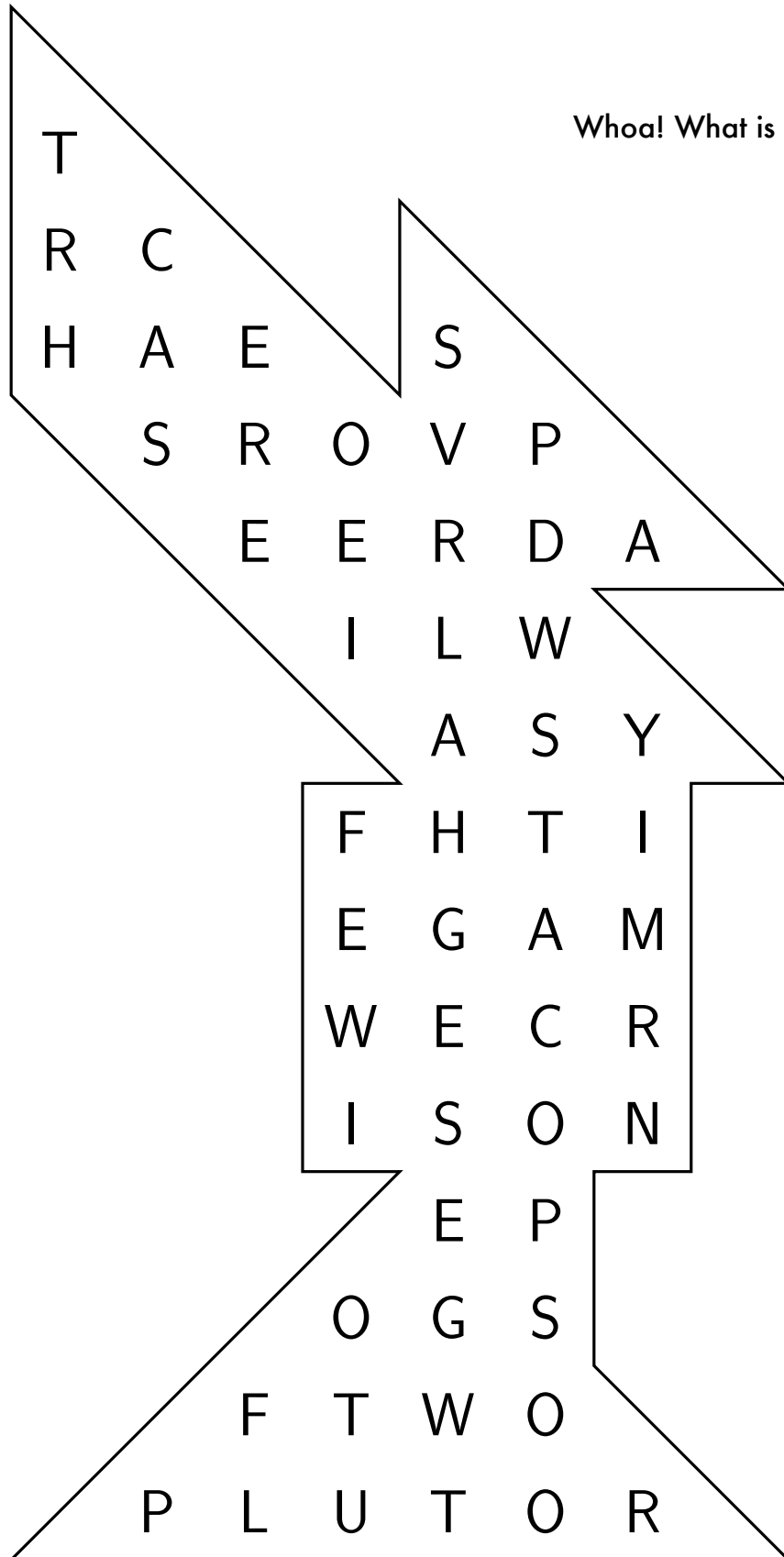
$$\int_2^4 \int_{-4}^{x-4} f(x, y) dy dx$$

$$\int_{-4}^0 \int_y^{y+4} f(x, y) dx dy$$

$$\int_{-4}^0 \int_x^{-x} f(x, y) dy dx$$

$$\int_0^4 \int_0^4 f(x, y) dx dy$$

$$\int_0^2 \int_{-4}^{x-4} f(x, y) dy dx$$



Whoa! What is *this* thing supposed to be?

The fourth thing you should know about the Secret Multivariable Puzzle Challenge is that you are allowed to get one hint. Just one! To request a hint, email ostroff@uw.edu from your UW email address. Be sure to include your name, which puzzle you're stuck on, and what you've tried so far.