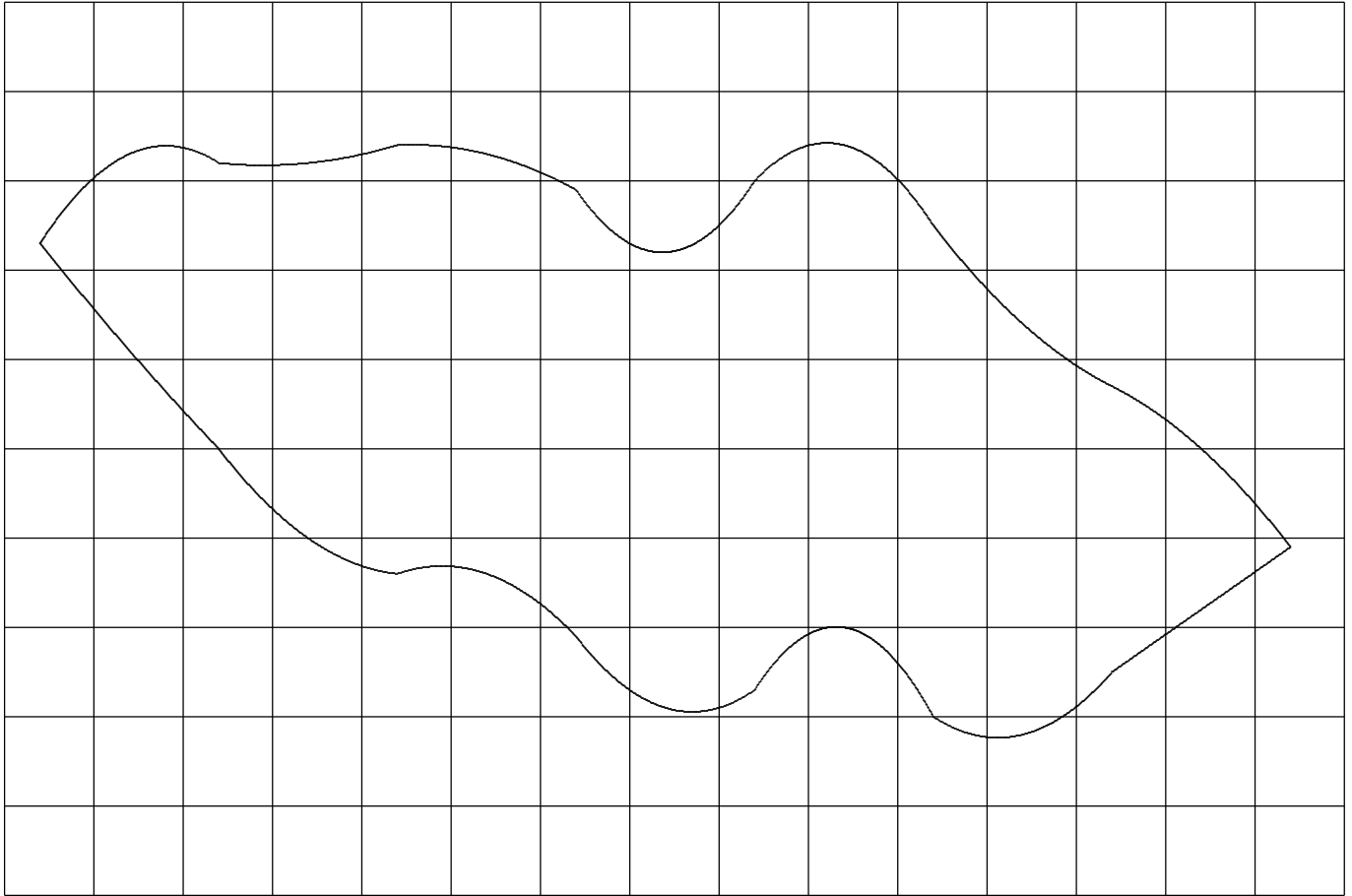


MthT 430 ****

There was a very small pond ...

Square Cm Graph Paper



Woebegone County needs a good estimate of the area of Small Pond. Grant funds depend on the area, and there are severe financial penalties for misrepresenting the area.

Above is a representation of Small Pond. Assume that the scale is $1\text{cm} \equiv 10\text{m}$. Estimate the area of Small Pond *as accurately as you can*.

Type your solution. As a minimum, your writeup [typeup] will

- Contain only complete sentences [“ $a = b$.” is a complete sentence],
- State explicitly any assumptions made about the representation of Small Pond,

- Describe completely the methods and tools (rulers, calculators, . . .) used to estimate the area,
and, most importantly,
- Discuss the error in your approximation and the sources of error.

Suggestions and Submission Dates on Following Page

Some issues you might wish to consider:

- How accurate is the representation of Small Pond?
- Are there particular regions or points of Small Pond where finding a good approximation might be difficult?
- Are there functions related to the project? What are the domains of the functions?
- You may wish to view an enlarged picture of the representation.

See <http://www.math.uic.edu/~lewis/mtht430/chap8cproj.pdf>

You are encouraged to work together, but the typeup must be your own work and acknowledge collaborators.

Assignment due dates:

November 27, 2002 – 6 PM: Progress Report – A note to jlewis@uic.edu on your progress on the project.

December 4, 2002 – 5 PM: Completed typed project due.