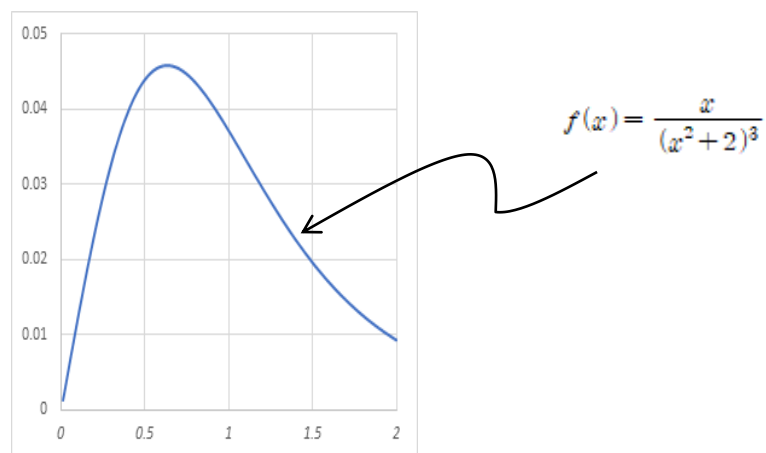# Homework Assignment 1 – due on Monday, September 18 (Midnight)

Description of Assignment:
You are to write a C program(*area.c*) which calculates the area (using the trapezoidal rule) under the curve of a graph of *f(x)* shown in the following integral and figure.

$$\int_0^2 f(x)dx = \int_0^2 \frac{x}{(x^2+2)^3} dx$$

$$f(x) = \frac{x}{(x^2+2)^3}$$

- Use a command-line argument for the number of loops. For example, "**area 1000**" means that the program loops 1000 times.
- Your program should print **the calculated area**, **elapsed milliseconds** and **GFLOPS**.

Turnin the assignment:
After done your assignment, type **turnin** in your current working directory. You can retype the command at any time before the due date.