Quiz 1

Your name:

Your TA's name:

No calculators, no notes, no books. Show all your work (no work = no credit). Write neatly. Simplify your answers.

1. [3 points] Evaluate the integral $\quad I = \displaystyle\int_0^1 \frac{x+5}{x^2+4x+3}\, dx.$ Simplify your answer.

2. [4 points] Use Simpson's Rule to approximate the integral $I = \int_{-1}^{3} \dfrac{x^3}{x^2 + 4}\, dx$ if $n = 4$. Write your answer as a single rational number.

3. [3 points] Evaluate the integral $I = \int\limits_{-\pi/3}^{\pi/3} \tan^7 t \sec^4 t \, dt$. Write your answer as a single number.

bonus problem [5 points extra] Evaluate the integral $I = \int_1^4 \dfrac{\sqrt{x}}{\sqrt{x}+2}\, dx$. Simplify your answer.