Take-Home Quiz 3

Due: Friday, March 20 (by 11:30am)

Math 152 Calculus II - Crawford

Books, notes, and calculators *are* allowed. You <u>are</u> allowed to work with each other and to get help from the tutors, but you cannot get help from me. **You must show all your work.** [Scores will be scaled to 15 points after grading.]

Evaluate the following integrals.

1. (10 pts)
$$\int \frac{3x^3 + 4x + 4}{x^4 + 4x^2} dx$$

2. (10 pts)
$$\int \frac{1}{x^2 \sqrt{4x^2 + 1}} dx$$

3. (10 pts)
$$\int_0^{\pi/3} (\cos x + \sin x)^2 \cos 2x \ dx$$