♣ Problem of the Week ♣
Due at noon on 4/27/2012
Suggested Prerequisites: Calculus 1

Problem:

Let $f(x) = \lceil x \rceil$. That is, $f(x)$ is the smallest integer greater than or equal to x. (Ex: $f(2.33) = 3$ or $f(2) = 2$)).

$$\text{Evaluate } \int_0^{5/2} f(x)dx.$$

Rules: This contest is open to Cumberland University students only. Solutions must be submitted by the deadline indicated. The first student to submit a correct answer **with supporting work** wins the prize ($10.00). Any outside sources must be cited. **All work must be shown**. Work will initially be judged by Dr. Gammon. Disputes will be sent to another mathematician for a second opinion. Submit you solutions either typed in e-mail to kgammon@cumberland.edu or written legibly to Dr. Gammon, Memorial Hall room 310 A.

Georg Cantor

"I place myself in a certain opposition to widespread views on the nature of the mathematical infinite."

- Cantor