In Homework 5, you should have calculated (for a round torus):

$$E = r^2$$
  $F = 0$  and  $G = (R + r \cos u)^2$ 

To calculate the surface area of the round donut (mmmm frosting):

- a)  $\int_0^{2\pi}\!\int_0^{2\pi} r^2(R+r\cos u)^2$ dv du
- b)  $\int_0^{2\pi} \int_0^{2\pi} r(R + r \cos u) \, dv \, du$
- c)  $4\pi^2 rR$
- d) more than one holds
- e) none of the above

