QUIZ 8

1. Suppose that we have a cube whose sides are 10.

(a) Find the exact amount of paint needed to put a layer of thickness 0.1 on the surface of the cube.

(b) Use differentials to approximate the amount of paint.

(c) Show that the approximation you get by using the differentials is equal to the surface area multiplied by the thickness.

The first two parts are worth 4 points each, and the last part is 2 points.