

Quiz 18 (Problems)

1. For the solid bounded in the first octant by the plane $4x + 2y + z = 12$ with density $\delta(x, y, z) = 5x^3$,
 - a. find it's mass.
 - b. set up (but don't solve) the integral to find M_{xz} .

Quiz 18 (Answers)

1. (Math-252 Quiz 18)

a. $m = 243$

b. $M_{xz} = \int_0^3 \int_0^{6-2x} \int_0^{12-4x-2y} (5x^3)y \, dz \, dy \, dx$