

Math 2415 – Calculus III

Assignment

Professor: Fred Houry

You baked a nice cake and when the cake is almost done, someone tilts the baking pan in the oven with 60° angle (see the picture).



The pan's dimensions are given: $L = 12 \text{ in}$, $w = 6 \text{ in}$ $d = 2 \text{ in}$.

Find the **centroid** (center of the pan's mass)

Hint:

Let the x -axis to be the horizontal axis and the pan length lay on it that axis.

Let y -axis to be the vertical axis and the pan length lay on it that axis.

Let z -axis to be toward you and parallel to the pan width (and center).