

Takehome Quiz 2**Calc 3****Due 10/30/24**

Open book, open note, open neighbor, open internet, *for figuring things out*, but you're responsible for writing up your own final submission without reference to anything except your own work and the textbook.

1. Find the centroid of a cone with height h and base radius R .

2. Consider a trapezoid with vertices $(0, 0)$, $(1, 0)$, $(a, 1)$, and $(0, 1)$. For which positive values of a is the trapezoid stable on its base, i.e. the segment from $(0, 0)$ to $(1, 0)$?