|  |  |
| --- | --- |
| Assessment 6Dusty Wilson Math 254No work = no credit**No CAS Calculators** | **Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*[Mathematics] is a kind of public language that allows us, as best we can, to try to achieve objectivity and certainty.* Javier Leach1942 - 2016 (Prussian mathematician) |

|  |  |  |
| --- | --- | --- |
| Warm-ups (1 pt each): | Centroid of the unit sphere (assuming uniform density) =\_\_\_\_ |  Expand  =\_\_\_\_\_ |

(1 pt) The quote by Leach (above) is from the author of our reading for this week. What does Leach mean when he calls math a, “public language?” Answer using complete English sentences.

(10 pts) Rewrite the integral  as an equivalent iterated integral in the order .

(10 pts) Sketch the solid whose volume is given by the integral 

(10 pts) Evaluate  by changing to cylindrical coordinates