ENED 1100 – Fall 2022
HW 8.1: Measurements and Estimations

Task 2 Answer Sheet

Task 2a.) Calculate the volume for each sample, displaying to the answer to the correct significant figures. You can model the brat as a cylinder.

Sample	Weight (oz.)	Length (in.)	Diameter (in.)	Volume (in^3)
1	2.733	6.474	1.302	8.620
2	2.720	6.460	1.299	8.561
3	2.770	6.196	1.296	8.174

Show Calculation for one of the samples:

Sample 1: (pi)*r^2*h
(pi)*(1.302/2)^2*6.474
V = 8.61955 in^3

Task 2b.) What process parameter appears to vary the most, leading to an inconsistent product?

The length is the most varying process prarameter, leading to an inconsistent product.

Task 2c.) After signing and submitting your report for the FDA documentation, you notice that the weight scale calibration date expired the week before. What actions, if any, should you take?

I should alert the FDA about the error in measurements, then recalibrate the measurement tools, remeasure the required parameters, then send in a new report for the FDA documentation.