CS 437 | HW 2 | Clark Lindsay

1.) 165.56 V (Code attached)

2.) 170 V

3.) 86.67 V

4.) 145 V

5.) 166.43 V (Code attached)

6.) There was a small variation. Mamdani is more computationally burdensome but also more accurate than Sugeno.

7.) Considering a thermocouple accuracy of ±0.5°F and a scale accuracy of ±0.2 lbs, 50,000 rows would be needed. See attached Excel file for sample table.

8.) A brief exploration of this yielded a flawed equation of $V(t,w) = 170 - t^{7/8} + 2w$ which provides a very rough approximation for a few inputs. I think a fully formed function would be O(n) as that is the longest factor.