Course	**ENGR 13300**	**Semester**	/eg. Fall 2024/
Assignment Name	/eg. HW3 EX3 Team #2/	**Section**	/eg. LC1/
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<--- replace the shaded text with actual values
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Academic Integrity Statement: I/We have not used material obtained from any other unauthorized source, either modified or unmodified. Neither have I/we provided access to my/our work to another. The solution I/we am/are submitting is

Problem Description /add a description and delete this comment/

Input Section:

Table 1: Given measurement data

Sample time interval (unitless)	Viscocity (Pa·s)
1	0.53
2	0.526
3	0.532
4	0.483
5	0.485
6	0.527
7	0.529
8	0.533
9	0.476
10	0.482
11	0.529
12	0.526
13	0.534
14	0.479
15	0.477
16	0.526
17	0.529
18	0.532
19	0.478
20	0.484
21	0.526
22	0.533
23	0.525
24	0.48
25	0.481
26	0.535
27	0.531
28	0.527
29	0.474
30	0.477
31	0.527
32	0.529
33	0.529
34	0.484
35	0.48
36	0.532
37	0.529
38	0.532
39	0.478
40	0.485
41	0.535
42	0.532
43	0.529
44	0.484
45	0.476
46	0.528
47	0.532
48	0.529
49	0.483
50	0.483

Calculation Section:

Table 2: Compute number of data points within and outside the specifications

specification interval lower border (Pa*s)	0.475
specification interval upper border (Pa*s)	0.525
number of measurements below interval	1
number of measurements above interval	20
number of total time intervals	50
outside specification	21
within specification	29

Table 3: Computation of percentage of values within

within specification	58.00%

Figure Section:

Figure 1: Measurement of viscosity in 50 evenly spaced time intervals

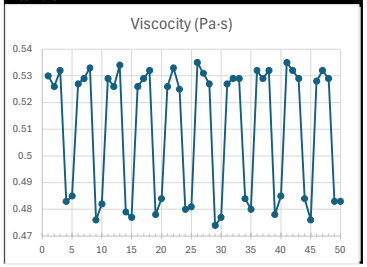
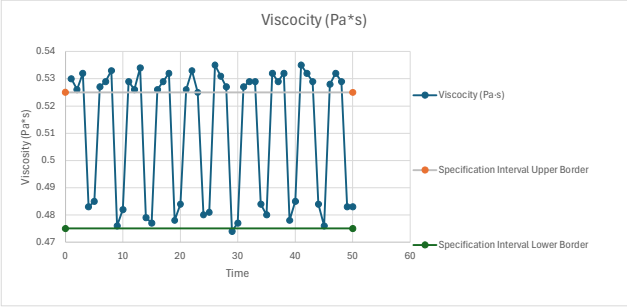


Figure 2: Measurements of viscosity in 50 evenly spaced time intervals with specification interval



Output Section:

#3: Type of plot

Scatter Plot

a) Does the data appear to have outliers or errors in measurement? Why or why not?

There may be an error in measurement because the viscosity is occasionally high, around .53. and low, around .48, with no measurements in between, it may be necessary to check what processes are occuring during the measurement period that may affect the viscosity.

b) What percentage of the measurements meets the specification of being within [.475,.525]Pa*s

58% of the measurements fall in the specification

c) Given your answer to the previous question, and your plot, summarize the engineer's main message to the engineering team about the process.

The manufacturing process needs to be considered as it is producing viscosities often above the tolerances specified