

(show all work for full credit)

1. Construct a Shewhart chart for the 20 measurement results obtained from a reference standard. List your calculated values. Mark the central line and the warning and action/control lines.

1	4.21	6	4.04	11	4.12	16	4.03
2	4.23	7	4.27	12	4.22	17	4.14
3	4.30	8	4.20	13	4.23	18	4.17
4	4.32	9	4.07	14	4.36	19	4.34
5	4.11	10	4.32	15	4.10	20	4.22

For the control chart that you constructed, analyze the following data obtained over 20 days and the conclusion for each day and overall process.

1	4.44	6	4.08	11	4.11	16	4.32
2	4.35	7	4.34	12	4.33	17	4.00
3	4.12	8	4.41	13	4.20	18	4.12
4	4.32	9	4.23	14	4.15	19	4.11
5	4.18	10	4.01	15	4.17	20	4.11