

XII. Oven temperature at Chewy Pizza restaurants was in control when these samples were taken. Construct an \bar{X} chart and an R chart for this data using a 99.74% confidence interval.

Sample #	1	2	3	4	5	6	Totals
Oven Readings	405	402	398	410	391	411	
	404	404	390	402	409	409	
	397	412	388	412	400	407	
Sample Mean							
Sample Range							

Sample Size (n)	A ₂	D ₃	D ₄
2	1.880	0	3.267
3	1.023	0	2.575
4	0.729	0	2.282
5	0.577	0	2.115

XIII. Potential customers were asked to rate brand A and brand B. Little is known about population distributions. Test at the .10 level of significance whether these brands were viewed equally by these potential customers. A paired difference sign test may be conducted even though this is not a test for statistical dependency.

Customer	Brand A	Brand B
1	87	89
2	91	97
3	81	85
4	73	81
5	92	98
6	89	81