Practice Set 17   Statistical Quality Control

I. Darin is doing a quality control study of the 30-milligram parts first analyzed in chapter 11.
This data has been reproduced below. Assume the data consisted of 12 three-part samples.
Also assume the process was in control when these samples were taken. Construct an $\bar{x}$
chart and an R chart for this data using a 99.74% (3 sigma) confidence interval.

Sample #	1	2	3	4	5	6	7	8	9	10	11	12
	29.89	30.05	29.98	30.07	29.97	30.05	29.95	30.06	29.99	30.02	30.09	30.12
	29.96	29.97	30.06	30.05	29.95	29.95	29.99	29.89	29.99	30.08	30.06	30.16
	29.97	29.98	30.04	30.06	30.05	30.09	30.06	30.09	29.98	30.01	30.08	30.15
Sample Mean												
Sample Range												