**Student Name: ST. ID#:……………………………………………………**

CUSUM Problem (CUScore): Consider the data in the Table, Column (A). The first 20 of those observations under normal distribution with µ=10, σ=1. The last 10 observations under normal distribution with µ=11, σ=1. Draw the Chart (UCL=13, CL=10, LCL=7). Conclusion?

**Sample Size?**

|  |  |
| --- | --- |
| **Obs, i** | **xi (A)** |
| 1 | 9.45 |
| 2 | 7.99 |
| 3 | 9.29 |
| 4 | 11.66 |
| 5 | 12.16 |
| 6 | 10.18 |
| 7 | 8.04 |
| 8 | 11.46 |
| 9 | 9.20 |
| 10 | 10.34 |
| 11 | 9.03 |
| 12 | 11.47 |
| 13 | 10.51 |
| 14 | 9.40 |
| 15 | 10.08 |
| 16 | 9.37 |
| 17 | 10.62 |
| 18 | 10.31 |
| 19 | 8.52 |
| 20 | 10.84 |
| 21 | 10.90 |
| 22 | 9.33 |
| 23 | 12.29 |
| 24 | 11.50 |
| 25 | 10.60 |
| 26 | 11.08 |
| 27 | 10.38 |
| 28 | 11.62 |
| 29 | 11.31 |
| 30 | 10.52 |

**Conclusion?**

**Student Name: ST. ID#:……………………………………………………**

**C0=0**

**Ci=(xi-10)+Ci-1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Obs, i** | **xi (A)** | **xi-10 (B)** | **Ci=(xi-10)+Ci-1 (C)** |
| 1 | 9.45 |  |  |
| 2 | 7.99 |  |  |
| 3 | 9.29 |  |  |
| 4 | 11.66 |  |  |
| 5 | 12.16 |  |  |
| 6 | 10.18 |  |  |
| 7 | 8.04 |  |  |
| 8 | 11.46 |  |  |
| 9 | 9.20 |  |  |
| 10 | 10.34 |  |  |
| 11 | 9.03 |  |  |
| 12 | 11.47 |  |  |
| 13 | 10.51 |  |  |
| 14 | 9.40 |  |  |
| 15 | 10.08 |  |  |
| 16 | 9.37 |  |  |
| 17 | 10.62 |  |  |
| 18 | 10.31 |  |  |
| 19 | 8.52 |  |  |
| 20 | 10.84 |  |  |
| 21 | 10.90 |  |  |
| 22 | 9.33 |  |  |
| 23 | 12.29 |  |  |
| 24 | 11.50 |  |  |
| 25 | 10.60 |  |  |
| 26 | 11.08 |  |  |
| 27 | 10.38 |  |  |
| 28 | 11.62 |  |  |
| 29 | 11.31 |  |  |
| 30 | 10.52 |  |  |

**Conclusion?**