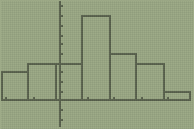
***Bootstrapping Program Testing***

**Setting Constant Lists:**

*TI-83:*

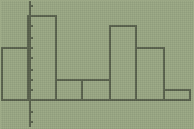
Symmetric Unimodal: {61, 24, 33, 3, 84, 39, -64, 54, -3, -32, 52, 37 109, -27, 68,

112, 21, -11, -43, 45, 46, 65, 81, 5, 103, 32, 42, -40, 91, -8}



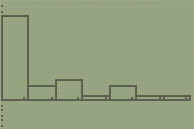
Bimodal: {-20, 61, 24, 33, 3, 84, 39, -64, 54, -3, -32, 52, 37, 109, -27, 272,

316, 225, 192, 160, 249, 250, 269, 285, 209, 307, 236, 246, 163, 195}



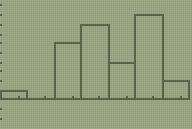
Right-Skewed: {5, 27, 33, 1, 19, 6, 6, 1, 1, 3, 13, 1, 15, 1, 11, 2, 1, 40, 30, 1, 20, 1,

1, 20, 1, 11, 28, 41, 6, 1}



Left-Skewed: {44, 36, 47, 46, 14, 37, 36, 31, 29, 31, 47, 39, 35, 45, 50, 46, 26,

37, 42, 42, 35, 31, 33, 49, 29, 41, 35, 45, 50, 49}



Uniform: {1, 6, 40, 19, 26, 25, 46, 20, 9, 22, 50, 12, 25, 4, 49, 16, 26, 21, 12,

6, 49, 12, 8, 48, 20, 20, 32, 12, 28, 14}



**TI-83**

r = Resample size

Testing for bounds: 1 ≤ r ≤ 15

Iteration constant: 50

|  |  |  |  |
| --- | --- | --- | --- |
| Resample Size:  Type of Distribution | r = 1 | r = 8 | r = 15 |
| *Symmetric Unimodal*  randNorm:  Lower Bound- 1  Upper Bound- 50 |  |  |  |
| *Bimodal*  randNorm(µ & 9µ) x 2:  Lower Bound- 1  Upper Bound- 50 |  |  |  |
| *Right-Skewed*  E+Frand(30)3  Lower Bound(E)- 1  Upper Bound(F)- 50 |  |  |  |
| *Left-Skewed*  E+Frand(30)⅓  Lower Bound(E)- 1  Upper Bound(F)- 50 |  |  |  |
| *Uniform*  randInt  Lower Bound- 1  Upper Bound- 50 |  |  |  |

**TI-83**

r = Resample size

Testing for bounds: 15 < r < 30

Iteration constant: 50

|  |  |  |  |
| --- | --- | --- | --- |
| Resample Size:  Type of Distribution | r = 16 | r = 23 | r = 29 |
| *Symmetric Unimodal*  randNorm:  Lower Bound- 1  Upper Bound- 50 |  |  |  |
| *Bimodal*  randNorm(µ & 9µ) x 2:  Lower Bound- 1  Upper Bound- 50 |  |  |  |
| *Right-Skewed*  E+Frand(30)3  Lower Bound(E)- 1  Upper Bound(F)- 50 |  |  |  |
| *Left-Skewed*  E+Frand(30)⅓  Lower Bound(E)- 1  Upper Bound(F)- 50 |  |  |  |
| *Uniform*  randInt  Lower Bound- 1  Upper Bound- 50 |  |  |  |

**TI-83**

r = Resample size

Testing for bounds: r ≥ 30

Iteration constant: 50

|  |  |  |  |
| --- | --- | --- | --- |
| Resample Size:  Type of Distribution | r = 30 | r = 50 | r = 99 |
| *Symmetric Unimodal*  randNorm:  Lower Bound- 1  Upper Bound- 50 |  |  |  |
| *Bimodal*  randNorm(µ & 9µ) x 2:  Lower Bound- 1  Upper Bound- 50 |  |  |  |
| *Right-Skewed*  E+Frand(30)3  Lower Bound(E)- 1  Upper Bound(F)- 50 |  |  |  |
| *Left-Skewed*  E+Frand(30)⅓  Lower Bound(E)- 1  Upper Bound(F)- 50 |  |  |  |
| *Uniform*  randInt  Lower Bound- 1  Upper Bound- 50 |  |  |  |

So, in general, for the best optimal results of bootstrapping…

Resample Size < Sample Size < Iterations