# Basic Monte Carlo Forecasting – Manually plot work completion from dice rolls of throughput/velocity

Discover what Monte Carlo forecasting is by performing it by hand. This exercise simulates completing a project many times and plots the outcomes. Perform 7 more trials. Each trial involves filling all rows in a column until the remaining work count reaches zero.

1. Throw a six sided dice and subtract the number in the row above by this dice roll.
2. When a column reaches zero (or less, just enter 0), move onto the next trial column.
3. Plot each trial as a line graph on the following page. Trial 1, has already been plotted for you.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Week** | **Trial 1**  **5,1,6,4,2,2** | **Trial 2** | **Trial 3** | **Trial 4** | **Trial 5** | **Trial 6** | **Trial 7** | **Trial 8** | **Trial 9** | **Trial 10** |
| **1 (start)** | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| **2** | -(5) = 15 |  |  |  |  |  |  |  |  |  |
| **3** | -(1) = 14 |  |  |  |  |  |  |  |  |  |
| **4** | -(6) = 8 |  |  |  |  |  |  |  |  |  |
| **5 (shortest)** | -(4) = 4 |  |  |  |  |  |  |  |  |  |
| **6** | -(2) = 2 |  |  |  |  |  |  |  |  |  |
| **7** | -(2) = 0 |  |  |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |  |  |  |
| **11** |  |  |  |  |  |  |  |  |  |  |
| **12** |  |  |  |  |  |  |  |  |  |  |
| **13** |  |  |  |  |  |  |  |  |  |  |
| **14** |  |  |  |  |  |  |  |  |  |  |
| **15** |  |  |  |  |  |  |  |  |  |  |
| **16** |  |  |  |  |  |  |  |  |  |  |
| **17** |  |  |  |  |  |  |  |  |  |  |
| **18** |  |  |  |  |  |  |  |  |  |  |
| **19** |  |  |  |  |  |  |  |  |  |  |
| **20** |  |  |  |  |  |  |  |  |  |  |
| **21 (longest)** |  |  |  |  |  |  |  |  |  |  |