L1M1Checkpoint

Checkpoint L1:

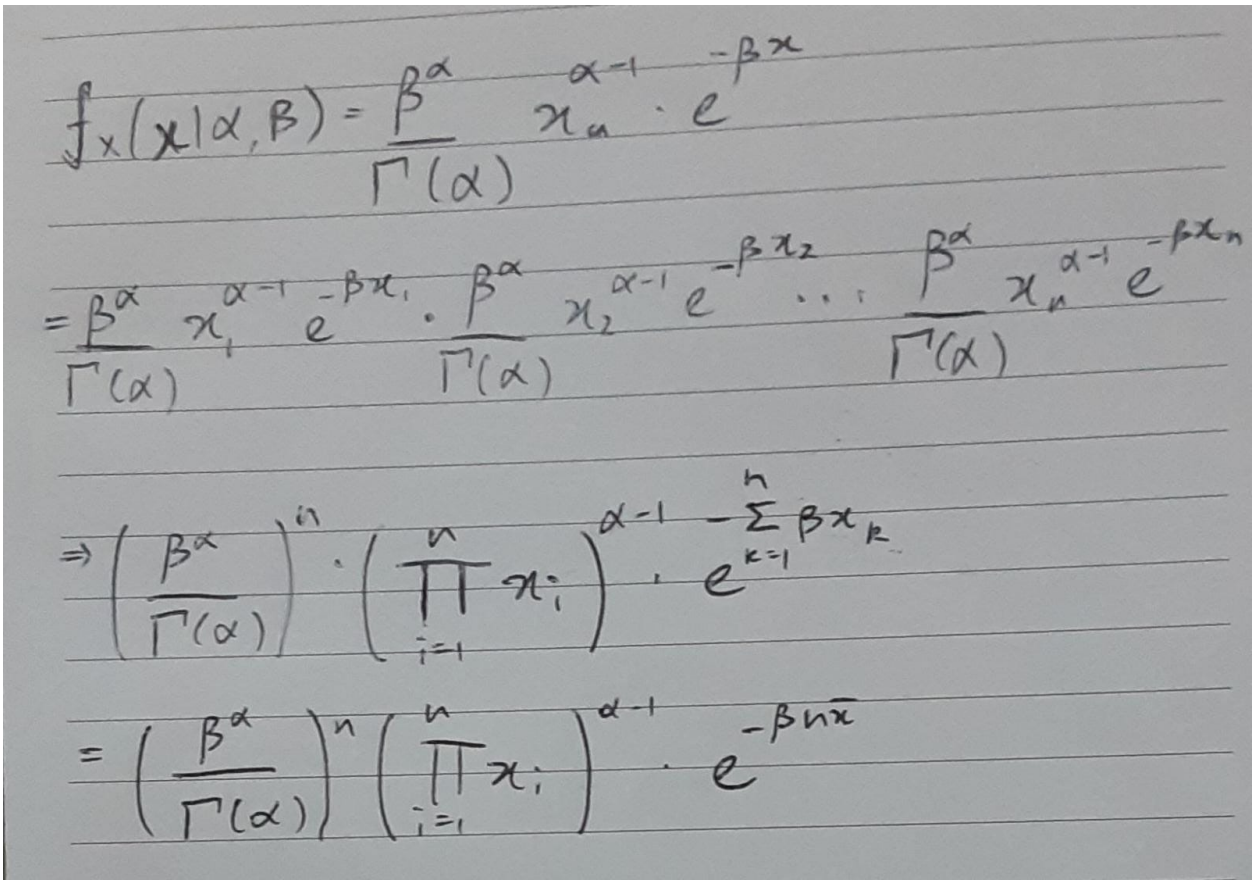

Figure 1: L1 Checkpoint

M1 Checkpoint:

Here, we will use $\beta = 4$ to produce the simulation.

```
paretobar<-rep(0,1000)
for(i in 1:1000){u<-runif(225);
  pareto<-1/(1-u)^(1/4);
  paretobar[i]<-mean(pareto)}
betahat<-paretobar/(paretobar-1)
mean(betahat)
```

```
## [1] 4.017911
```

```
sd(betahat)
```

```
## [1] 0.288513
```

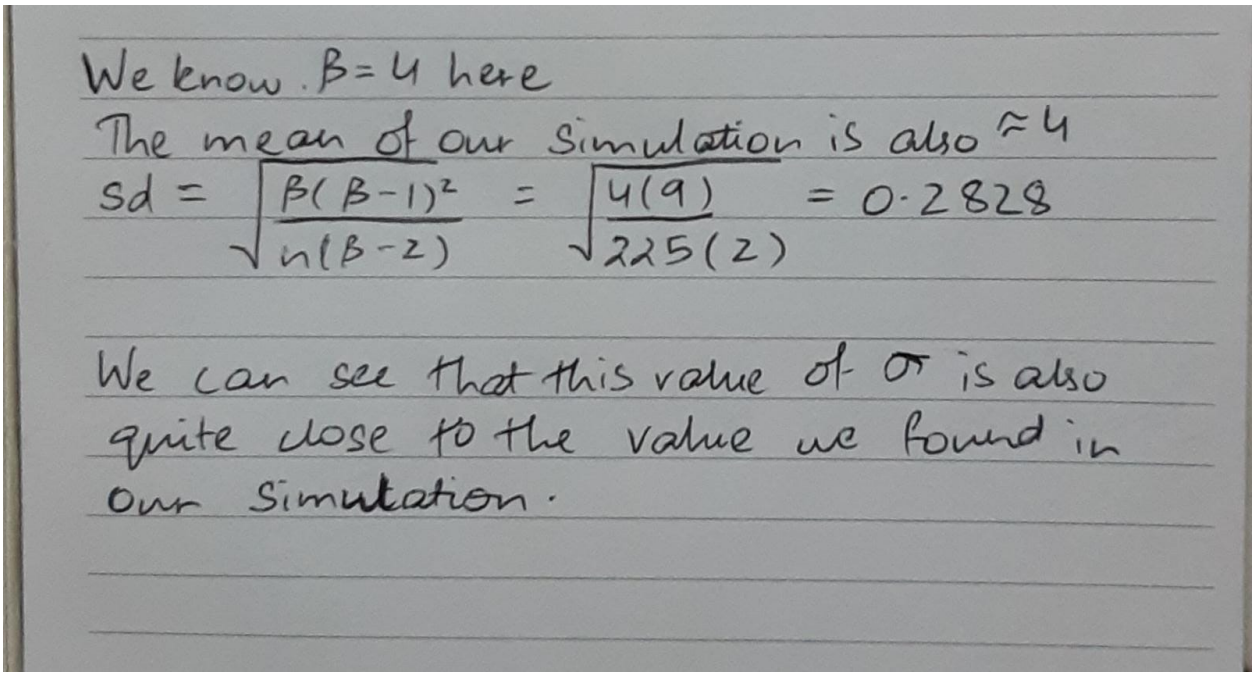

Figure 2: b4

Here, we will use $\beta = 5$ to produce the simulation.

```
paretobar<-rep(0,1000)
for(i in 1:1000){u<-runif(225);
  pareto<-1/(1-u)^(1/5);
  paretobar[i]<-mean(pareto)}
betahat<-paretobar/(paretobar-1)
mean(betahat)
```

```
## [1] 5.031454
```

```r
sd(betahat)
```

```
## [1] 0.3384557
```

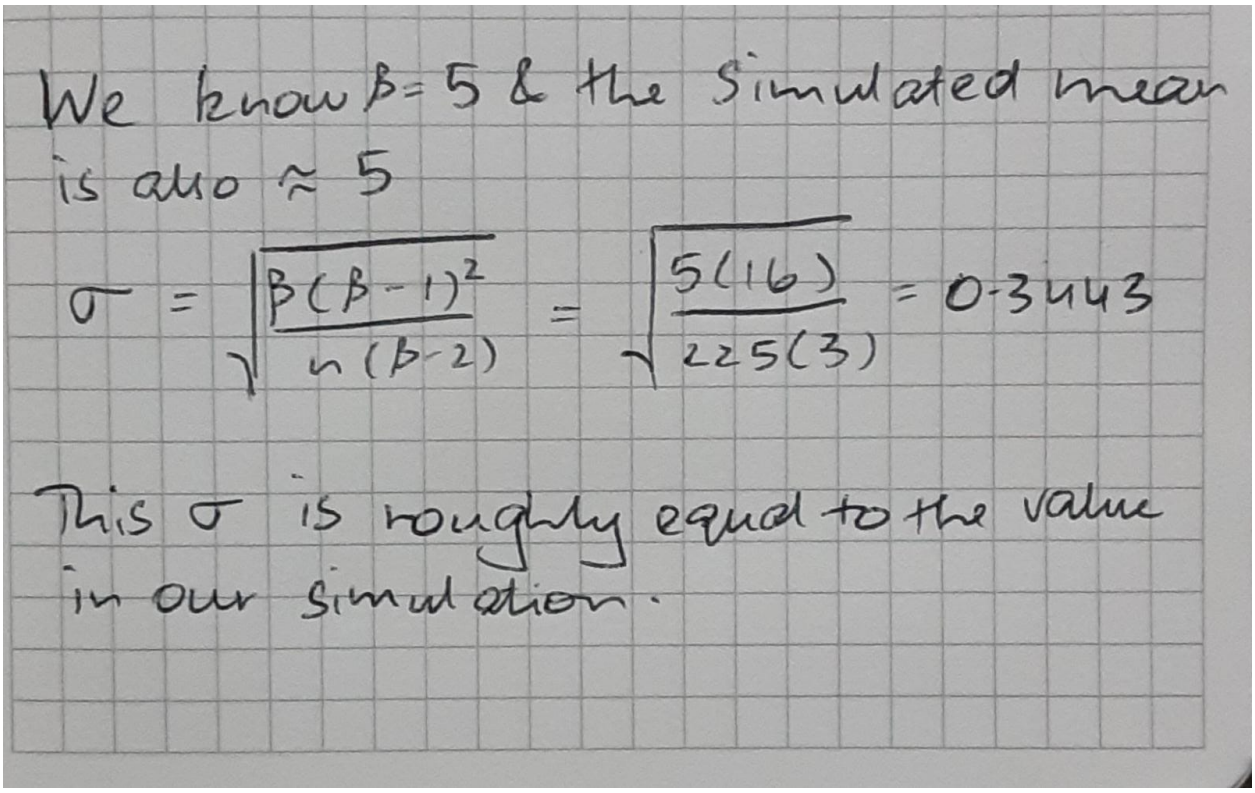

Figure 3: b5