Worksheet #34: impact of distribution on parallel completion time

Name: _____   Net ID: _____

```
1.   public void sampleKernel(
2.       int iterations, int numChunks, Distribution dist) {
3.     for (int iter = 0; iter < iterations; iter++) {
4.       finish(() -> {
5.         forseq (0, numChunks - 1, (jj) -> {
6.           asyncAt(dist.get(jj), () -> {
7.             doWork(jj);
8.             // Assume that time to process chunk jj = jj units
9.           });
10.         });
11.       });
12.     } // for iter
13. } // sample kernel
```

• Assume an execution with n places, each place with one worker thread
• Will a block or cyclic distribution for dist have a smaller abstract completion time, assuming that all tasks on the same place are serialized with one worker per place?

COMP 322, Spring 2018 (M.Joyner, Z.Budimlić)