Worksheet #33: impact of distribution on parallel completion time (instead of locality)

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

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