

Seriation

It is April 2032 and COA is digging up part of its campus to build a new sustainable shrine of St. Sylvania, who had been canonized in 2031 for her invention of compact fluorescent light bulbs. In the process of digging, student workers discover the graves of five COA students. You are called in as a (highly paid) seriation consultant to determine the ordering of the graves. The students are buried at five separate sites. In addition to the bodies you find the following objects in the graves:

- A: Bell-bottom corduroy pants, metal bottle, watch, bracelet
- B: ceramic mug, bracelet, a bag of lentils, knitting needles, a knife
- C: plastic bottle, knitting needles, watch, knife, bracelet
- D: metal bottle, bag of lentils, watch, bracelet
- E: Bell-bottom corduroy pants, bag of lentils, ceramic mug, knife, bracelet

1. There are two items that you probably don't want to include in your seriation analysis. Which ones, and why?
2. Construct the matrix A .
3. Calculate the matrix G .
4. Determine a plausible time-ordering for the five grave sites.