

**ENGR 196B**  
**Survival and Success Skills for Freshmen Engineers**  
**Spring**  
**University of Arizona**

Logic Problems

Algorithms are tools that show us how to solve new problems based on how we solved old problems. Think about an algorithm to solve the following problem:

Five authors have just sent their latest murder stories to the publishers - so we all look forward to reading them soon. In the meantime, however, we intend to completely spoil your enjoyment of the novels by inviting you to solve the problem of who murdered whom, as well as the motive involved and the location of the story.

1. Neither the butler nor the plumber committed the murder in Brighton, which was done for the sake of an inheritance.
2. The revenge killing didn't take place in Fishguard or Dunoon.
3. The artist didn't murder the partner (who was neither the victim killed in revenge nor the one murdered as a result of a power struggle).
4. The dentist murdered a cousin (but not for revenge or love) in Halifax.
5. The sister wasn't murdered in Brighton or Fishguard. The victim in Fishguard wasn't the one killed for the love of someone.
6. The butler didn't murder his partner.
7. In the novel in which the solicitor murders someone, the motive is power, but didn't involve the killing of a friend.
8. You don't know anything about the murder that took place in Grantham, the murder that involved blackmail, or who killed their mother.