



Problem of the Week

Problem D

The Spy's The Limit

A group of five spies, Agent A, Agent B, Agent C, Agent D, and Agent E, meet every Friday to share all the information they have uncovered over the previous week. To avoid suspicion, a spy can never be seen with more than one other spy at a time. As well, the spies always communicate face to face to avoid a paper trail.

Every Friday the spies conduct several rounds of meetings at various locations around town. Each round consists of two simultaneous meetings, which involve four spies in total. There is always one spy sitting out of the round.

In each meeting, each spy passes along all of the information they know. This includes both the information they gathered the previous week, as well as all of the information passed on to them from other spies in earlier meetings that day.

Determine the minimum number of rounds of meetings required in order for each spy to learn all of the information gathered by each of the other spies during the previous week.



This problem was inspired by a past [Beaver Computing Challenge \(BCC\)](#) problem.

