



Problem of the Week

Problem D

Ring Ring

The POTW school wants to create a phone tree system to be used in the event of an emergency school closure. Using a phone tree system, the principal phones at most three other employees, each of whom phones at most three other employees, and so on, until all of the employees have been contacted.

If the POTW school has 100 employees (including the principal) and uses a phone tree system where each employee phones 0, 1, 2, or 3 other employees, determine the maximum number of employees who do not need to make any phone calls in their phone tree system.

