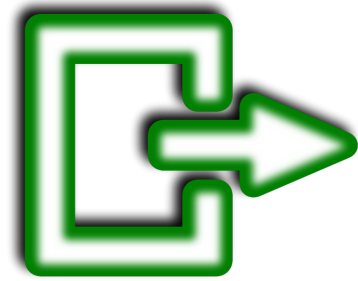
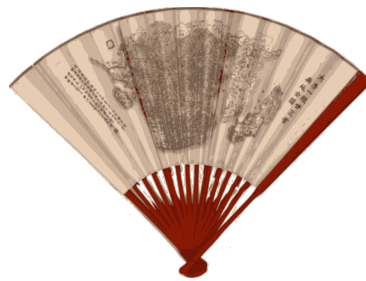




## Problem of the Week

### Problem D

#### Phone Fan Out



Some businesses, government offices, schools and hospitals have a phone fan out system that is used to quickly distribute important information to all of its employees.

A certain school, with a total of 100 employees, wishes to create a phone fan out system to be used in the event of an emergency school closure. The principal contacts three other employees, each of whom contacts three others, and so on, until all of the employees of the school have been contacted.

Determine the maximum number of people who do not need to make a call in this system.

