## -RECREATION CORNER-

## POPULATION EXPLOSION

BROTHER ALFRED BROUSSEAU
St. Mary's College, California

It appears that the time has come for the puzzlist to update some of the old-time conundrums. Take, for example, the type of problem in which some forty or fifty people are lined up in a circle and then beginning at a certain one, the group is decimated until there are only nine people left. The problem would be to choose one of the safe spots.

Now with the population explosion and the advent of the computer, the puzzle of the future may run like this. At 3:52 P. M. of December 2nd, all citizens are warned that there is to be a selection of numbers for the purpose of determining who will not pay an extra 5 percent income tax. The executives being very fair-minded make plain what the plan is: Starting with $1,000,000$ and working backward every third number is to be selected in cyclic fashion until there are only two numbers left. Those persons who select one of these two numbers will not have to pay the extra 5 percent income tax.

Evidently, a very fair plan and extremely educational. Anybody who is stupid enough to select a number congruent to 1 modulo 3 deserves to be penalized for his lack of mathematical ability. But of course there are 666,665 other numbers that have to be dodged. The bureaucrats allow twenty-four hours for choosing a number. Here is where the Ancient Order of Puzzlists comes in. By having ready at hand some quick and efficient method for finding the two favored numbers, they can render a distinct service to their fellow citizens.

What are the two favored numbers and is there some reasonably simple method of finding them?

The answer and the method of arriving at it will be published in February, 1968.

