A major American bank has just sold an obscene volume of junk mortgages to a rival firm. The bank executives are trying to decide how they will distribute their $100 billion share of the sale. They decide to give each other bonuses. Even though they are an aggressive lot, the executives make decisions pseudo-democratically. Here is how they decide: the executives are ranked according to seniority. No two share the same level of seniority. The most senior proposes a distribution of the wealth and then all vote on it. If a majority agree, or if a for/against tie emerges, that distribution is agreed to. If a majority disagree, that majority frames the most senior executive, accusing them of insider trading and forcing them to resign. With that top-ranked executive out of the way, the second-highest proposes a distribution, and so on, until an agreement is made.

Here are some peculiarities of these executives:

- They will only accept natural number multiples of a billion, ie. 0, 1, 2 billion, and so on.
- No executive wants to resign.
- Each executive wants to maximize their bonus.
- Each executive would love to see the others resign, but not at their own, potential, expense.

What is the optimal proposal for the top-ranked executive given that there are:

1. 2 executives?
2. 3 executives?
3. 4 executives?
4. 5 executives?