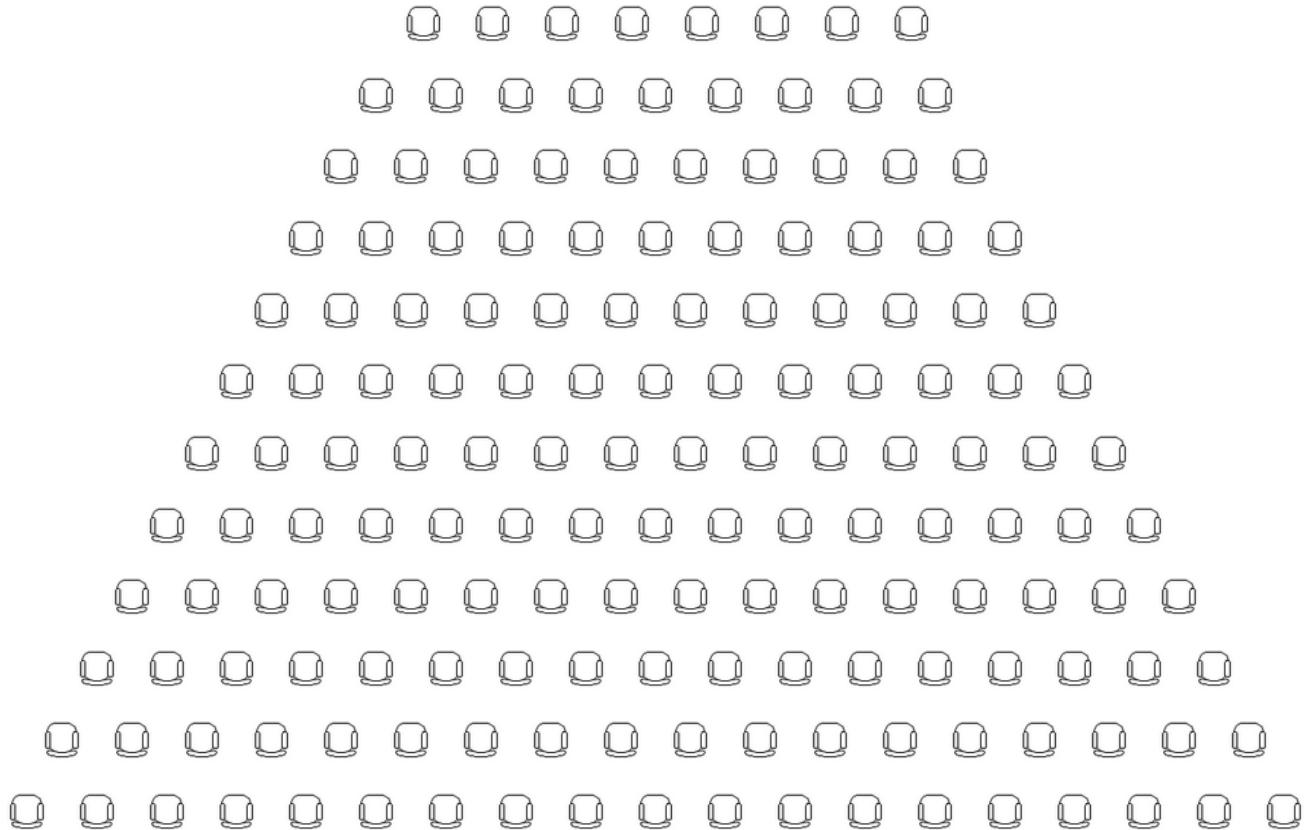


STAGE



THEATER Seats

There are 12 rows of seats in a small theater with 8 seats in the first row. Each higher row has one more seat than the row in front of it. In other words the second row has 9 seats, ..., and the last row has 19 seats.

- (1) How many seats are there in the theater?
- (2) What if you had something other than 8 seats in the first row, but you still had only 12 rows. Can you come up with a formula for the total number of seats if you start with "s" seats in the first row?
- (3) What if you had something other than 12 rows. could you come up with a formula for "r" rows?
- (4) What if you had "r" rows and "s" seats in the first row, now how many seats do you have in the theater.