## Party at Pascal's

Fast yet surprisingly well articulated


Pno.


Pno.
Pas-cal door. Now we've got one more so it's clear-ly time to play


Pno.


29 knock knock knock at the Pas-cal door. Now we've got one more so it's clear-ly time to play one game of bridge,





67 got one more, so it's clear-ly time to play one game of Se -ven Won-ders, se-ven games of Chi-nese check-ers,
 twen-ty one games of Risk, thir-ty five games of bridge,
thir-ty five games of mon-key in the mid-dle,



one country wes-tern square dance, eight games of Se -ven Won-ders, twen-ty eight games of Chi-nese check-ers,

fif -ty six games of Risk, se-ven-ty games of bridge,
fif-ty six games of mon-key in the mid-dle, $\theta$
86

Pno.
$\qquad$




Pno.
eight-y four games of Chi-nese check - ers, one
twenty six games of Risk, one twenty six games of bridge,




Q: How can one room be large enough for a basketball court and a rowing pool?
A: It's a big room. This fact is repeated several times. Please pay attention.
Q: Why does Pascal have a live cox for his crew boat but no live caller for his square dance?
A: Rowing without a live cox is considerably more dangerous than square dancing to a recorded caller.
Q: Is this another parody of "12 Days of Christmas"?
A: Absolutely not, but since you ask, I will say this: the total number of gifts given on the $k$ th day of Christmas is $\mathbf{1 + 2 + 3 + \ldots + k}$, which is equal to $\mathbf{k}(\mathbf{k}+\mathbf{1}) / \mathbf{2}$, which is the number of chess games played the $\mathbf{k}$ th time chess is mentioned. The cumulative number of gifts given on Christmas days $\mathbf{1}$ through $\mathbf{k}$ is $\mathbf{k}(\mathbf{k}+\mathbf{1})(\mathbf{k}+\mathbf{2}) / \mathbf{6}$, which is the number of monkey in the middle games played the $\mathbf{k}$ th time monkey in the middle is mentioned. The number of types of gifts given on the $\mathbf{k}$ th day of Christmas is simply $\mathbf{k}$, which is the number of solitaire games played the $\mathbf{k} t \mathrm{t}$ time solitaire is mentioned. In short, mathematically speaking, all the interesting patterns in "12 Days of Christmas" are also encoded in "Party at Pascal's".

Q: They play a lot of games, don't they?
A: The total number of games played at Pascal's house when $\mathbf{k}$ people are present is $\mathbf{2}^{\mathbf{k}}$ (if you count the room itself as an "empty game"), which is the number of subsets of a k-person set. That sounds like a lot, but it's nothing compared to what happens at the end of the party, when somebody insists that the $\mathbf{1 0}$ guests line up (in all $\mathbf{1 0}$ ! permutations) for photographs.

Q: What if more guests arrive?
A: Proceed with a refereed basketball game, a volleyball game, a witches' coven, a 14-piece jazz band, a 5-4-3-2-1 cheerleader pyramid, a double square dance, a double square dance with a live caller, a baseball game, a 19-piece chamber orchestra, a lacrosse game, a 6-5-4-3-2-1 cheerleader pyramid, a soccer game, and a round of "Let's see if two of us share a birthday".

