

Teddy Bear's Banquet Student Work

#1: Sarabella

Answer:

44 guests can sit at 10 tables, 108 guests can sit at 25 tables, and 432 guests can sit at 100 tables. To figure out the pattern you need to add 4 to each table. If you wanted to seat 120 bears it would take 20 tables.

Explanation:

At first I drew picture and got a visual, but then i noticed the pattern (add four for every table).

#2: Grace

Answer:

1. 38 bears, 2. 110 bears, 3. 410 bears

Explanation:

First I found out how many people at tables there were, there were 6. I looked at the corners and found out that we would have to subtract some. So, I did for the rule: $x4 + 5 + 5$. Because there was going to be two tables with five from the corners.

#3: Nathan

Answer:

I think 42 teddy bears can sit at 10 tables, 102 teddy bears can sit at 25 tables, and 402 teddy bears can sit at 100 tables. Extra: The rule for calculating how many teddy bears can sit at how many tables is the number of tables(I will make this variable t). $(t-2) \times 4 = g$, then $g + 10 =$ how many teddy bears can be seated at how many tables. another rule is $tx4$, then $+2$. Extra 2: it would take 30 tables to seat 120 teddy bears.

Explanation:

I think 42 teddy bears could sit at 10 tables because a pattern I found was $\text{Tables} - 2 = ?$, $? \times 4 = x$, $x + 10 =$ number of teddy bears that can be seated at the tables. $10 - 2 = 8$, $8 \times 4 = 32$, $32 + 10 = 42$, so 42 = maximum number of teddy bears able to sit at 10 tables. This also works on 25 tables, $25 - 2 = 23$, $23 \times 4 = 92$, $92 + 10 = 102$, so $102 =$ Maximum number of teddy bears able to be seated at 25 tables. problem 3: $100 - 2 = 98$, $98 \times 4 = 392$, $392 + 10 = 402$.

Extra: another rule for finding out how many bears can sit at how many tables is by doing $\text{Tables} (t) \times 4 = ?$, $? + 2 =$ maximum number of teddy bears able to sit at a number of tables.

Extra II: I think the staff needs 30 tables to seat 120 teddy bears because using my rule, I did $30 \times 4 = 120$, $120 + 2 = 122$, and you need extra seats to seat all the bears. I know this is correct because if you take a table away, you have 29 tables, but $29 \times 4 = 116$, $116 + 2 = 118$ so you can't have 29 tables to seat 120 bears. This is how I got my answers to the five questions.

#4: Kyle

Answer:

The answers for 1,2,and 3 are 42,102,and 402.

Explanation:

On each side 2 people can sit. 2 people can sit at the ends. How I did it is I doubled the number of tables, and doubled it again. Then added 2.

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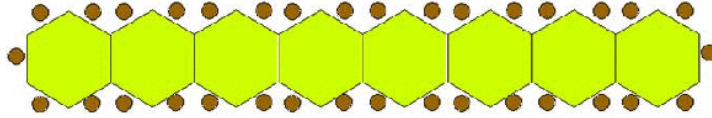
#5: Samuel

Answer:

The number of seats is calculated by this formula : $4x + 2$. Where x is the number of tables.

Explanation:

I imagined an huge row of tables. I noticed that on the row, each table losed 2 seats, only 4 seat were available per table. I concluded that each table were giving 4 seats. The first and last table are the only one who gives 5 seats, so I added 2 to the formula.



#6: Eden

Answer:

10 I got 42 for 25 i got 102 for 100 I got 402

Explanation:

I first got 10 by drawing tables Ina sragight line then igo to mutipley $4 \times 10 = 40 + 2 = 42$. For numberd 25 I multiplied by two and try to to solve how much bears can fit into5 tables 84 plus 18 equals 102 then for numberd 100 if to right all those tables and $400 +$ the to of number 1 100 402 is my answer

#7: Jessica

Answer:

The number of seats is calculated by this formula : $4x + 2$. Where x is the number of tables.

Explanation:

No. of tables	No. of seats
1	6
2	10
3	14
4	18
5	22
6	26
7	30
8	34
9	38
10	42
11	46
12	50
13	54
14	58
15	62
25	102
100	402
29.5	120
T	$4T+2$

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#8: Lin

Answer:

My answer was $10 \text{ tables} = 42, 25 = 102, 100 = 402$.

Explanation:

First I found a pattern. The pattern I found was every table you push together you lose 2.

tables	1	2	3	4	5	6	7	8	9	10
seats lost	0	2	4	6	8	10	12	14	16	18

For ten I got 42 because 60 (the amount of seats if they were not pushed together) $- 18 = 42$. What I did for 25 was $25 * 2 = 50 - 2 = 48$. I got what I need to subtract. $150 - 48 = 102$.

For 100 I did $100 * 2 = 200 - 2 = 198$ because the first table on the side you don't lose any seats. $600 - 198 = 402$.

#9: Melissa

Answer:

If 10 people can sit at 2 tables, then 50 people can sit at 10 tables, 250 bears can sit at 25 tables, 1000 bears can sit at 100 tables.

Explanation:

