## #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 paturn you need to add 4 to each table. If you wanted to seet 120 bears it would take 20 tables.

### Explanation:

At first I drew picture and got a visual, but then i noticed the patern (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)X4=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 Tables-2=?, ?x4=x, x+10=number of teddy bears that can be seated at the tables. 10-2=8, 8x4=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, 23x4=92, 92+10=102, so 102= Maximum number of teddy bears able to be seated at 25 tables. problem 3:100-2=98, 98x4=392, 392+10=402.

Extra: another rule for finding out how many bears can sit at how many tables is by doing Tables (t)X4=?, ?+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 30x4=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 29x4=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.

## #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 | got 42 for 25 i got 102 for 100 | got 402

## Explanation:

I first got 10 by drawing tables Ina sragight line then igo to multipley  $4 \times 10 = 40 + 2 = 42$ . For numberd 25 I multiplied by two and try to to solve how much bears can fit into 5 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
т	4T+2

#8: Lin

Answer:

My answer was 10 tables=42,25=102,100=402.

2

4

6

0

## Explanation:

seats lost

First I fou	Ind a	patter	n. Tl	ne pat	tern	l found	was	every	table you	u push to	gether y	ou lose 2.
tables	1	2	3	4	5	6	7	8	9	10		

10

8

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.

12

14

16

18

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:



# #10: Richard

## Answer:

42 bears can sit at 10 tables. 102 bears can sit at 25 tables. 402 bears can sit at 100 tables.

# Explanation:

I got my answer by first seeing how many sides one regular hexagon has. It has 6 equal sides. When I connected two regular hexagons together, they took up one side from each of the hexagons so both hexagons altogether would have 10 sides. If I added an extra hexagon to the two other hexagons that were connected that would make it 14 sides total. When a third regular hexagon is added then the regular hexagon in the middle has one other side that has been taken up which leaves the regular hexagon with 4 sides. Always when there is a regular hexagon on the side of a straight line it will always be 5. After doing what I have just wrote would lead me to the possible answers of 42 bears being able to sit at 10 tables, 101 bears being able to sit at 25 tables or 402 bears being able to sit at 100 tables. Before I show my example of the work I did I am going to say that I used the amount of sides for each hexagon instead of the actual regular hexagon. Here is an example of my work: This is how I got my answer for how many bears can sit at 10 tables.

1. 5 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 5 = 42 bears

This is how I got my answer for 25 tables.

This is how I got my answer for 100 tables.

#### #11: Nina

Answer: My answers are 42, 102, and 402.

# Explanation:

**EXTRA2** 29 I used my rule and I tried 30 in the g spot but it was to large in the total so I tried 29 and my answer was correct.

**EXTRA1** Rule: (g x 6)-(g x 2)+2= a a= answer g= number of tables

1. How many bears can sit at 10 tables?

42 To find out the answer

I did 10x6=60.60-(10x2)+2=42. I did 10x2 because you get rid of 2 spots when you put the table together and then you add 2 because there are 2 spots on the end.

**2**. How many bears can sit at 25 tables? **102** To find out my answer I did the same thing as the first question except I did  $25 \times 6$  instead of  $10.25\times6=150$ .  $150-(25\times2)+2=102$ .

**3**. How many bears can sit at 100 tables? 402

To find out my answer I did the same thing as the other questions by using the rule. (100x6)-(100x2)+2= 402.