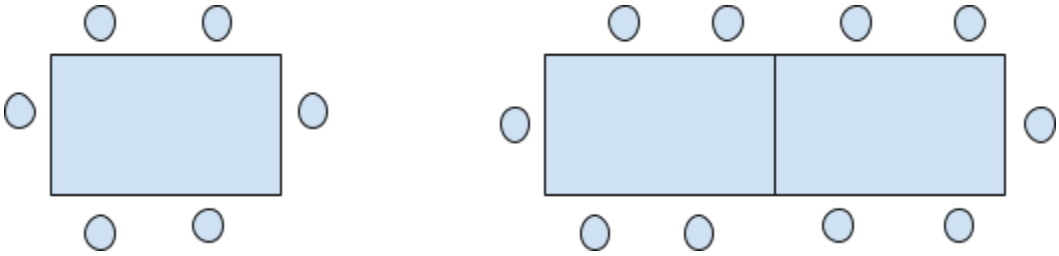
Problem of the Month

Name _____

I am hosting Easter/Passover/Thanksgiving and I have a lot of tables. 6 people can sit together at one rectangular table. If 2 tables are placed together, 10 people can sit together.



1. Draw a diagram to show how many people could sit at 3 tables.

2. How many tables must be placed together in a row to seat 22 people?

3. What helped you figure out this number of tables for 22 people? Explain how you thought about it.

4. If 10 tables are placed together in a row, how many people can be seated?

How about 15 tables?

20 tables?

Table Hopping, part 2

1. Create a table of values, if you haven't done so already.

2. Describe any patterns you notice.

3. What would help you figure out how many people could sit at ANY number of tables?

4. Enter *n* in the "In" column of your table and then write the generalization that describes the number of people that would sit at *n* tables in the "Out" column.

5. How many people could sit if 100 tables were put together? Explain your thinking.

6. Could this pattern work for any other table shape? Give evidence for your thinking.

7) Describe how the visual representation of the tables can help explain the generalization without using a table.

8) What is an appropriate range of people who could sit at 3 tables? Write as an inequality and as an interval. Justify your answer.

*9) What is an appropriate range of people who could sit at *n* tables? Justify your answer.

Self Evaluation – Check whichever apply.

Google Form for evaluation

Participation	Math
O I was quiet during the work time O I paid attention during the presentations. O I participated well with my pair/small group.	O I understand how to find the number of seats if I know the number of tables O I made an IN and OUT table. O I made an algebraic expression.

This was a _____POD (problem of the month).

I did _____ on this POD.