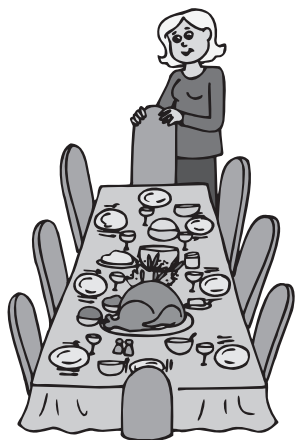


The Thanksgiving Dinner Party

An Algebraic Thinking Investigation



Patty Pilgrim was planning Thanksgiving dinner for 24 guests. She rented square tables that seated one on each side. How many tables would she need to seat the guests?

When Patty received the tables, she realized she did not want the guests seated at separate tables, so she began pushing them together like this:



1 Table



2 Tables



3 Tables

When the tables are pushed together, what happens to the number of guests that can be seated? Describe any patterns you see on the figures above, and use your patterns to determine:

How many guests could be seated at 6 tables pushed together?

How many tables would Patty need to seat her 24 guests?

Write a generalization you could use to find the number of guests seated at *any number of tables*.