TABLES AND CHAIRS ...

Dean's community is planning a street party. They have lots of small square tables. Each table seats 4 people like this:

The community decides to put the tables in an end-to-end line along the street to make one big table.

a. Make or draw a line with 2 tables. How many people will be able to sit at it?

b. Make or draw a line of 4 tables. How many people will be able to sit at it?

c. Make or draw a line of tables that would seat 8 people. How many tables are needed?

d. Make or draw a line of tables that would seat 12 people. How many tables are needed?

e. Make or draw a line of tables that would seat 20 people. How many tables are needed?
f. Fill in the shaded boxes to show your results so far.

<table>
<thead>
<tr>
<th>Number of Tables</th>
<th>1</th>
<th>2</th>
<th>4</th>
<th>8</th>
<th>12</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

g. Can you find another way to describe your results so far? Show this in the space below.

h. The community can borrow 99 tables. How many people could they seat using 99 tables placed end-to-end? Show your working and explain your answer in as much detail as possible.

i. The community can borrow rectangular tables that seat 6 people. Draw one of these tables showing the people sitting around it.

j. Draw a line of 5 of these rectangular tables placed end-to-end. How many people will be able to sit at it?
k. Explain what happens to the number of people as more rectangular tables are placed end-to-end. Describe or show your findings in at least two ways.

l. How many people could be seated if 46 of these rectangular tables were placed end-to-end? Show your working and explain your answer in as much detail as possible.

m. How many of these rectangular tables would you need to place end-to-end to seat 342 people? Show your working and explain your answer in as much detail as possible.