## TABLES AND CHAIRS

1. Below and 3 different arrangements of 16 tables. Use Xs to mark chairs all around (no chairs at the corners).

- which arrangement has the most chairs?
- which has the least?
- why does the number of chairs change when the tables are always 16 ?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. Now suppose we only had 12 chairs. How many tables could we surround?

- one possible arrangement is shown below
- can you find the rest?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\mid$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | X | X | X | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  | X



