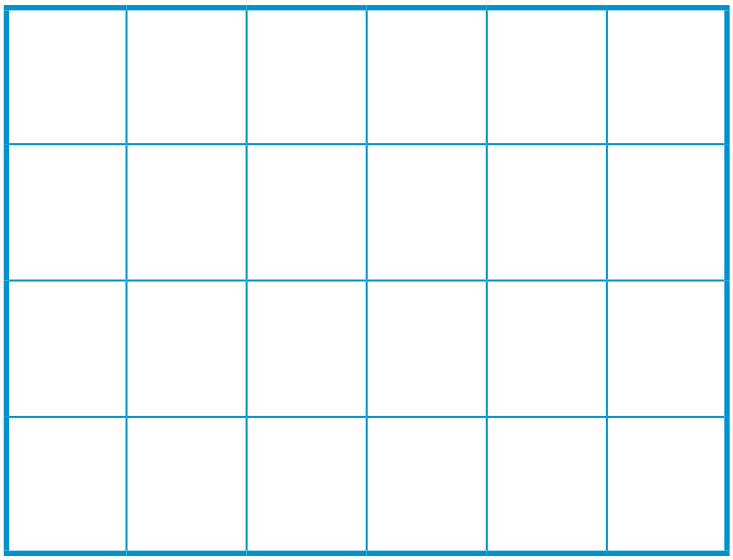
Problem of the Week #7

The Crate

7

A crate made up of 4 rows of 6. It can hold 24 cans.

Try placing 18 cans so that each row and each column has an even number of cans in it.



Problem of the Week #8

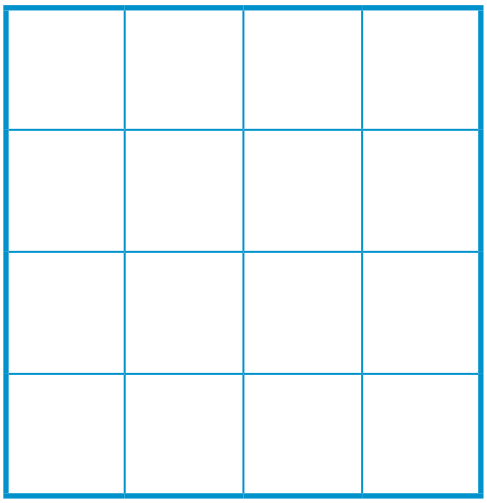
Rows and Columns

8

Place 16 counters onto a 4 x 4 grid - one in each space.

Remove 6 counters so that there is an even number of counters in each row and column.

Look for more than one solution - how many can you find?



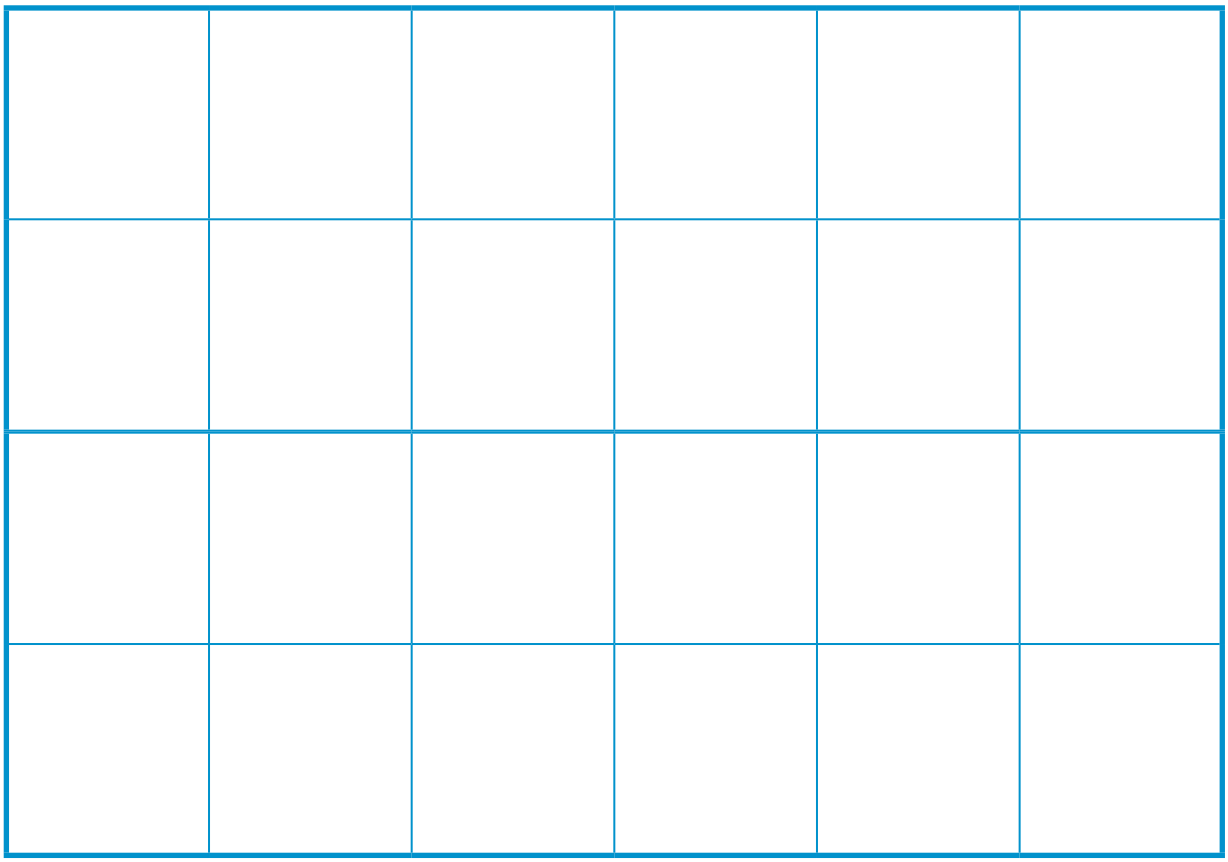
Teachers Notes:

Problems 7 & 8:

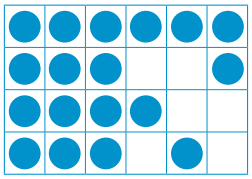
These problems involve spatial thinking. They involve geometric reasoning. Reasoning is one of the four proficiency strands in the mathematics curriculum.

Some students will find it easier if they use counters to try various options. We have provided a larger version of the crate so counters will fit in the squares.

Some students will find it easier to think about the six empty squares.



Here is one solution. There are variations



Problem 8:

This problem and two similar ones may be found on page 36/37 of "Counters in the Classroom"

I have provided two solutions

Students should be encouraged to look for more than one solution.