Fun Maths Puzzles Volume 22 Term 3 2007

The Almost-Double Tetronimo Puzzle

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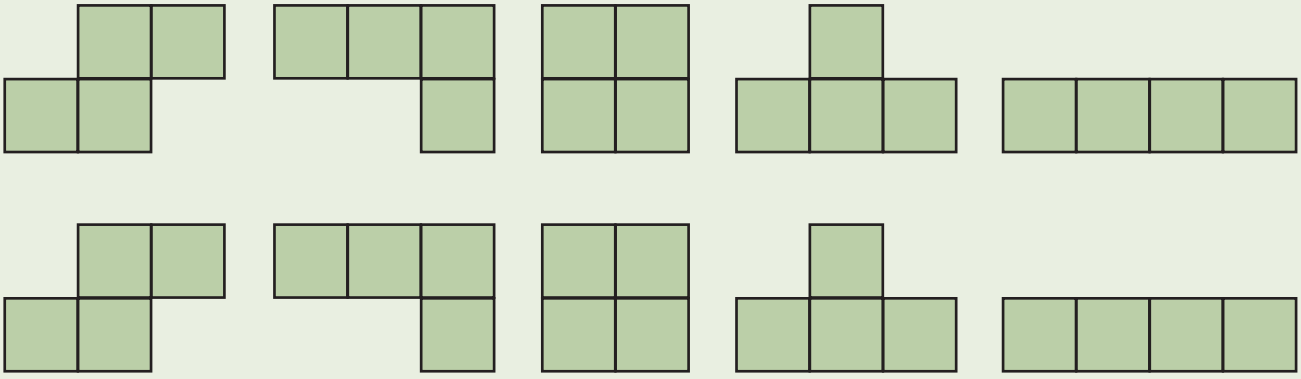
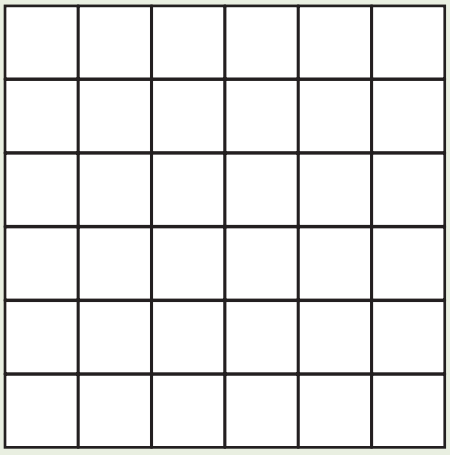
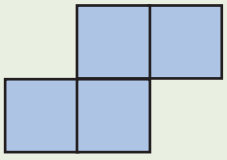
Take a double set of tetronimoes (two lots of FIVE mathematically distinct geometric shapes, each made by joining FOUR congruent squares together by whole-edge joins).



Use a 6x6 square grid board (where the squares of the grid are the same size as the squares that make the tetronimoes).



Set one of the tetronimoes aside (for the time being). For example:



Fit ALL the remaining tetronimoes into the board, with no overlapping of one piece on another, and no part of a piece protruding over the edge of the board.

Can you do it? (How many mathematically different ways?)

Can you do this, starting with a different tetronimo set aside? (How many mathematically different ways?)

(Do you know why the computer game Tetris is called this?)