## Gordon Burgin's Puzzles

## May 2017 challenge

Each month, a new set of puzzles will be posted. Come back next month for the solutions and a new set of puzzles, or subscribe to have them sent directly to you.

## MIND-Xpander Logic Problem

You have a piece of paper, 10 cm . by 10 cm . Area $=100 \mathrm{~cm}^{2}$. For some reason, you need a square piece of paper with an area of $50 \mathrm{~cm}^{2}$. Using the paper you have, what's an easy way of getting the new square?

## Algebraic challenge

By replacing each question mark with an algebraic sign (,,$+- x$ and /), solve the following equations for the answers as shown:
( 6 ? 4 ) ? $12=12$
(7?3) ? (4 ? 1) = 26
$(4$ ? 2$)$ ? $(4$ ? 3$)=24$
$(6 ? 5) \vee(9 ? 2)=19$

## Chinese Multiplication puzzle

Also known as a lattice method, the Chinese method provides an easy way to multiply any two numbers without the aid of a calculator. In the following puzzles, some or part of the multiplied or added values are provided. The object of this puzzle is to find the missing values to determine the original numbers that when multiplied together gives you the correct product as shown on the bottom line. Find these missing values.

