



# Gordon Burgin's Puzzles

## June 2017 challenge

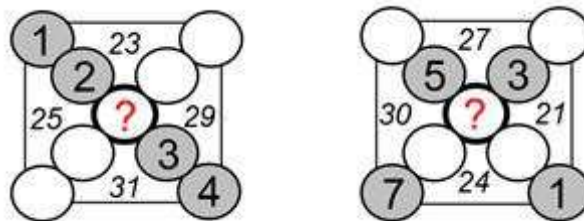
### MIND-Xpander Logic Problem

In basic algebra, a rational expression is nothing more than a fraction in which the numerator and/or the denominator are polynomials. Reduce the following rational expression to its lowest terms (?).

$$\frac{6^5 - 6^4}{5} = ?$$

### X-Sums Puzzles

The 4 numbers, in italics, outside the 9 circles represent the sum of the numbers in the 5 surrounding circles. The numbers in the circles can only be 1 to 9 and each number can be used only once. Four numbers have been provided to get you started. Find the number (?) that should be in the centre of the X.



### EQUATE+3 Puzzle

Each row, column & diagonal is an equation and you use the numbers 1 to 9 to complete the equations. Each number can be used only once. 'Three' numbers have been provided to get you started. Find the remaining six numbers that satisfies all the resulting equations. Note – multiplication (x) & division (/) are performed before addition (+) and subtraction (-).

6	+		-		=	14
+	+	-		+		
	x	4	-		=	27
-		/	+	x		
	-		x	3	=	1
=		=	=	=		
7		7	16	13		