



Y	O	
H	A	
K	U	

Years 9 and up.

Here are some algebraic yohaku puzzles to celebrate Maths Week in England. To solve yohaku puzzles you must fill in the empty cells such that they give the sum or product shown in each row and column. The numbers in the cells must also satisfy any given conditions below each puzzle. Some puzzles may have multiple answers.

		$8x + 2y$
		$5y$
$5x$	$7y + 3x$	$+$

Each cell must be different.

Each cell must contain an x and a y term.

			$3a^3b^2c^2$
			$7a^4$
			$5b^2c^3$
$7abc$	abc^3	$15a^5b^2c$	\times

Each cell must be different

		$24x^2 - 21x$
		$30x + 25$
$18x^2 + 15x$	$40x - 35$	\times

		$x^2 + 16x + 63$
		$x^2 - 12x + 35$
$x^2 - 49$	$x^2 + 4x - 45$	×

			$2x^3 - 2x$
			$3x^3 - 9x^2 + 6x$
			$15x^3 + 45x^2$
$2x^3 + 2x^2 - 12x$	$9x^3 + 9x^2$	$5x^3 - 10x^2 + 5x$	×

		11
		0
6	8	×

Use 4 different numbers.
All answers are mod 12.
Sum of 4 cells is 10 mod 12.