

Star Challenges and High Level Challenges motivate and extend students.

30-33 marks = 2 stars
25-29 marks = 1 star

Ch 1: Create your own magic square

In a magic square, the total of the numbers in every line, across, down and diagonally, is the same.

1	4	1
2	2	2
3	0	3

In this magic square the line totals are 6. The magic sum is 6.

1. Complete each magic square:

8		6		5		10	
	5			6		11	12
		2		7	8	15	

2. What is the connection between the sum for each square and the number in the centre of the square ?

3. Use this connection to complete these squares:

(12 marks)

3		2		5			3
	4			10			0
		0			7		-1

4. Complete these magic squares using terms involving n .

$n+2$			$n-1$		
	n			n	
$n-5$			$n-3$		

5. Invent a magic square of your own with n in the middle square. (9 marks)
6. Complete this magic square using terms involving n , a & b :
7. Complete this magic square.

$n-a$		$n-b$
	n	

(6 marks)

a		b
	$a+b$	

This starts with a L4 number problem. Look how far students can run with it. They love this approach !!