

THE DIVINE NINE

Math skills: Addition and multiplication
You will need: Pencil and paper
Difficulty level: 1

Introduction:

- ◆ Ask your students to do the multiplication in the next table.
- ◆ Now ask them to add the sums together and write the total under the “add” column. It’s a great way to learn about patterns.

Multiply	add
1x9= 9	9
2x9= 18	1+8=9
3x9= 27	2+7=9
4x9=	
5x9=	
6x9=	
7x9=	
8x9=	
9x9=	

- ◆ Ask them if they think that it is also going to work for large numbers.

multiply	add	Multiply	add
29x9= 261	2+6+1= 9	34x9=	
30x9= 270	2+7= 9	35x9=	
31x9= 279	2+7+9=18/ 1+8= 9	36x9=	
32x9=		37x9=	
33x9=			

How (and why) it works:

The series 9x1, 9x2, 9x3, 9x4 can be written as a series of addition: 9, 9+9, 9+9+9, 9+9+9+9 i.e. the series is generated by adding 9 to the previous number. This is the same as adding 10 and subtracting 1. This will result in no change, and since the first number in the series is 9 the other numbers in the series will be 9 as well.