

24.4.2020

Maths

3***

Today you are going to complete a Number Investigation.

Can you spot any patterns or come up with any rules when dividing a 3 digit number by 9.

Pick 3 digit numbers (you could roll a dice 3 times or just come up with your own to create these). Divide these numbers by 9. Organise your calculations to help you identify patterns.

It may be useful to set a table up in your book like this:

Calculation	Digit Sum	Whole Number Answer	Remainder of 1	R 2	R3	R4	R5	R6	R7	R8
$269 \div 9 = 29r8$	17									29r8
$324 \div 9 =$	9	324								
$466 \div 9 = 51r7$	16								51r7	

Look carefully at the answers. When is the answer a whole number? When is there a remainder of 1, 2, 3 etc?

Can you spot any patterns?

Can you come up with any rules?

For more information you can access this at:

<https://nrich.maths.org/10490/note>