



YR5 PROGRESSION IN MASTERY LESSON PACK - COUNTING IN POWERS OF 10

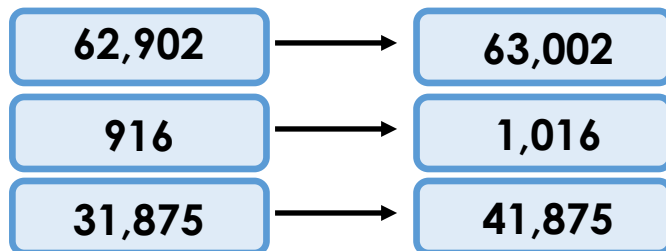
FLUENCY 1

Complete the missing numbers in the sequences below.

12,345			12,645		12,845
		2,815			3,115
8,756	8,766	8,776	8,786	8,796	8,806
76,543	77,543			80,543	
988				1,388	
41,682		41,702			

FLUENCY 2

What has been added to each number?



FLUENCY 3

Describe the term-to-term rules for each of Marlon's sequences.



812...822...832...842...852

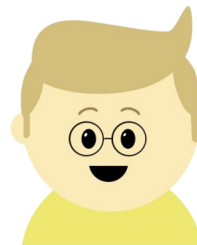
4,196...5,196...6,196...7,196...8,196

629...529...429...329...229

FLUENCY 4

Alfie starts counting from 12 and adds 1,000 each time.

What will be the tenth number he says?

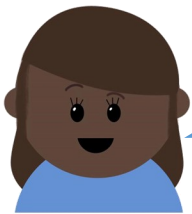




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REASONING 1

Always, Sometimes or Never?

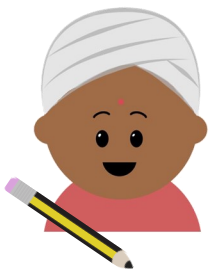


When counting in powers of 10,
I will only say numbers ending in
zero.

Explain your reasoning!

REASONING 2

What are the next two calculations in the sequence?



$$624,000 - 1,000 = 623,000$$

$$623,000 - 1,000 = 622,000$$

$$622,000 - 1,000 = 621,000$$

?

?

Explain how you know.

REASONING 3

Jane is using a Gattegno chart.

1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90
100	200	300	400	500	600	700	800	900
1000	2000	3000	4000	5000	6000	7000	8000	9000
10000	20000	30000	40000	50000	60000	70000	80000	90000

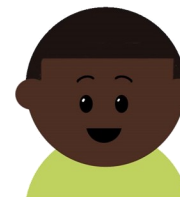


She says: "To add 100, I only need to move
one counter."

Is she correct? Explain your reasoning!

REASONING 4

Caleb is counting backwards in 100s.



32,400... 32,300... 32,200... 32,100...
31,900... 31,800...

Can you explain the error he has made?

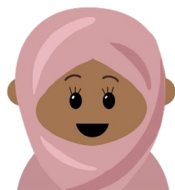


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PROBLEM SOLVING 1

How many different trails from left to right or top to bottom can you find through the grid by adding or subtracting powers of 10?

10,901	10,201	10,101	8,712	8,912	8,902	8,102	6,102	32,316	32,416	32,426	31,516
8,909	10,012	10,301	8,612	9,012	9,022	1,022	6,202	42,416	32,916	32,526	33,526
12,909	11,012	10,401	7,614	8,614	9,112	10,112	6,302	45,416	52,416	33,526	34,526
8,601	9,601	12,701	10,501	11,701	10,112	9,212	9,812	10,812	12,812	62,416	65,416
7,701	10,901	10,601	11,601	13,901	9,312	14,601	15,601	15,701	92,116	66,416	72,416
8,701	10,701	10,909	11,801	12,601	13,601	9,412	9,422	16,601	92,416	82,416	172,416
2,001	10,801	10,910	11,810	10,061	9,512	10,412	19,422	102,416	17,601	18,601	19,601
1,001	10,091	10,901	111,610	110,061	9,612	9,662	20,422	102,516	112,416	19,610	19,016
12,000	11,001	12,901	9,722	9,712	51,001	61,001	21,001	120,512	122,416	119,416	111,000
11,101	12,001	21,001	9,732	41,001	9,812	62,001	71,001	71,002	122,516	132,416	111,001
12,101	11,201	12,101	31,001	9,932	9,922	9,912	72,001	81,001	122,616	101,001	142,416
11,301	11,901	12,901	13,091	9,942	10,012	10,013	73,001	181,001	91,001	152,416	152,516



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