YR5 PROGRESSION IN MASTERY LESSON PACK - ROUNDING TO 10,000, 100,000, 1,000,000

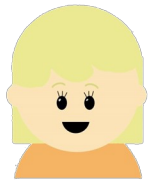
FLUENCY 1

Round the population of each of these countries to the nearest 10,000, 100,000 and 1,000,000.

		10,000	100,000	1,000,000
Cyprus	1,189,085			
Jamaica	2,898,677			
Norway	5,353,363			
Ireland	4,803,748			

FLUENCY 2

Help Jane to sort these six-digit numbers into two groups by rounding them to the nearest 100,000.



Rounds to 600,000

Rounds to 700,000

554,718 723,817 549,615 613,918

678,716 691,351 749,143 574,198

Which number will not fit in either group?

FLUENCY 3

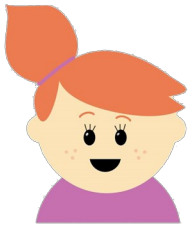
Round this number to the nearest

1,234,567

10	100	1000	10,000	100,000	1,000,000

FLUENCY 4

Describe how Millie could have rounded each number.



415,716 → 420,000

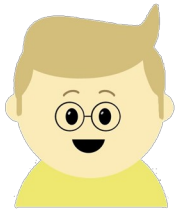
499,995 → 500,000

4,012,513 → 4,000,000

FLUENCY TASKS

YR5 PROGRESSION IN MASTERY LESSON PACK - ROUNDING TO 10,000, 100,000, 1,000,000

REASONING 1



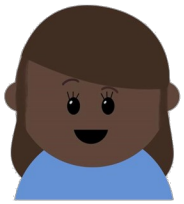
Alfie rounds the number 349,998 to the nearest 1,000 and the nearest 10,000.

What will he notice?

Can you think of 3 more numbers where this will be the case?

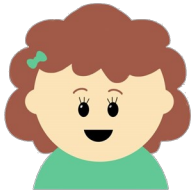
REASONING 2

Anita and Darcey are each thinking of a number.



My number has six digits. When rounded to the nearest 100,000, my number is 400,000.

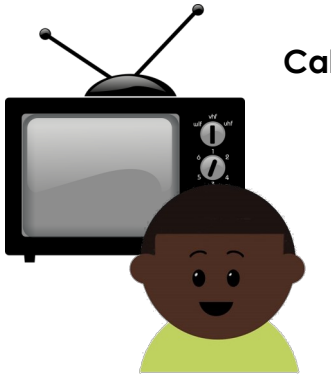
My number has seven digits. When rounded to the nearest million, my number is 7,000,000.



What could their numbers be?

Give three possibilities for each number.

REASONING 3



Caleb's favourite TV programme, Super Cops, has 1,200,000 viewers, when rounded to the nearest 100,000 viewers.

What is the range of viewers that Super Cops could have?

REASONING 4

Always, Sometimes or Never?

"When a number is rounded to the nearest 100,000, the hundred thousands column will be the only column which contains a digit other than 0."

Explain your reasoning with examples.

REASONING TASKS

PROBLEM SOLVING 1

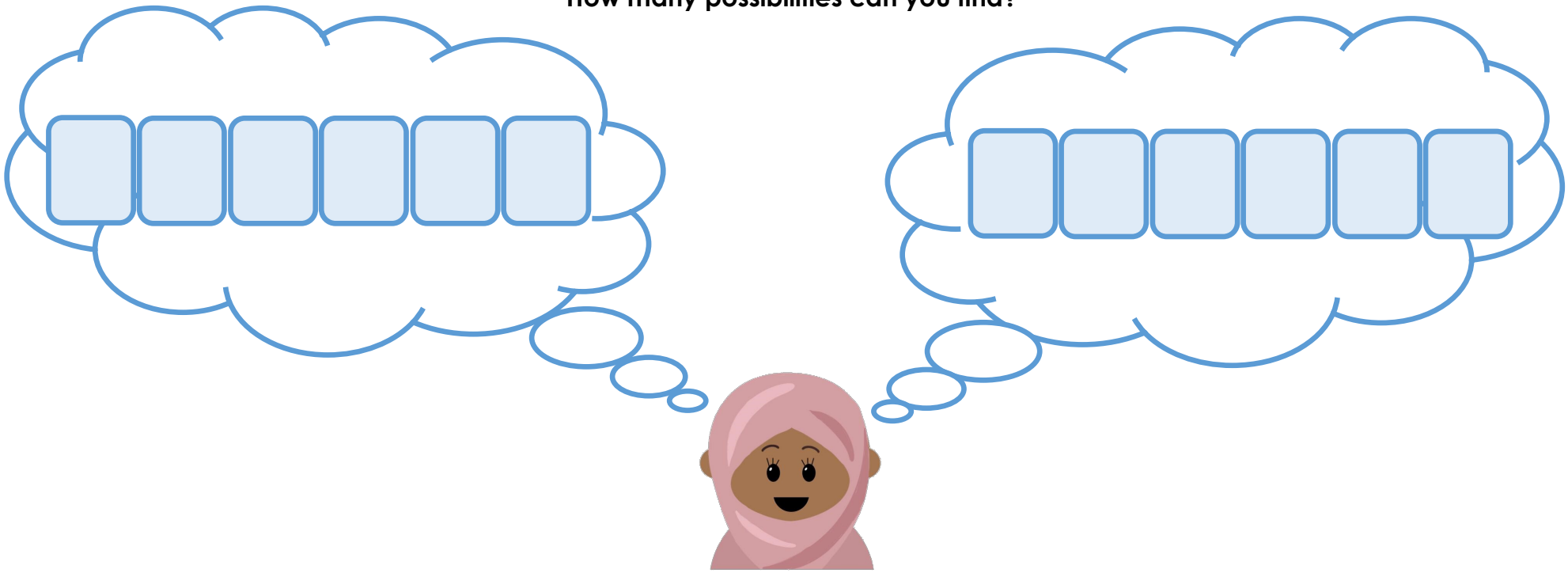
Asha is thinking of 2 six-digit numbers.

Her numbers have a difference of fifty.

When they are both rounded to the ten nearest thousand, the difference is 10,000.

What could her numbers be?

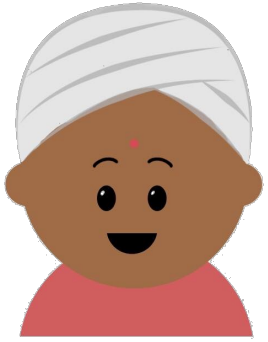
How many possibilities can you find?



PROBLEM SOLVING 2

Investigation Time!

Ranjit believes that the sum of two six-digit numbers rounded to the nearest hundred thousand is the same as rounding each individual number and then rounding the answer to the nearest hundred thousand.



234,817 + 498,716 = 733,533

733,533 rounded to the nearest hundred thousand is 700,000.

234,817 rounded to the nearest hundred thousand is 200,000.

498,716 rounded to the nearest hundred thousand is 500,000.

200,000 + 500,000 = 700,000.

Investigate whether this works every time and report back to Ranjit whether he is correct or incorrect.